JB

Stanford University Library
OCT
21
1903

THE FREE-WILL PROBLEM

IN

MODERN THOUGHT

BY

WILLIAM HALLOCK JOHNSON, A.M.

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
IN THE
FACULTY OF PHILOSOPHY
OF
COLUMBIA UNIVERSITY

NEW YORK
1903

3781
C72J
ENCLASSED

STANFORD UNIVERSITY LIBRARIES
WITHDRAWN

Digitized by the Internet Archive
in 2025

https://archive.org/details/freewillproblemi0000will

THE FREE-WILL PROBLEM

IN

MODERN THOUGHT

BY

WILLIAM HALLOCK JOHNSON, A.M.

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
IN THE
FACULTY OF PHILOSOPHY
OF
COLUMBIA UNIVERSITY

STANFORD LIBRARY

NEW YORK
1903

143363

Copyright, 1903,
by
WILLIAM HALLOCK JOHNSON.

STANFORD LIBRARY

PREFATORY NOTE

SINCE its acceptance as a doctor's thesis in June, 1903, this essay has been carefully revised with some additions, and references have been freely made to literature which has appeared during the past twelve months. For helps received in its preparation and in other ways, the thanks of the writer are due to Professors J. McK. Cattell and C. A. Strong, and to Drs. A. L. Jones and W. H. Sheldon.

JULY, 1903.

CONTENTS

PAGE

INTRODUCTION 9

I

FREE-WILL AND THE PSYCHOPHYSICAL QUESTION . . 12

II

FREE-WILL AND EVOLUTION 38

III

THE CONSCIOUSNESS OF FREEDOM 52

IV

FREEDOM AS ETHICAL POSTULATE 67

V

FREE-WILL AND THEOLOGY 84

THE FREE-WILL PROBLEM IN MODERN THOUGHT

INTRODUCTION

It is now some twenty years since Professor James opened his famous address on the "Dilemma of Determinism" with the remark that he knew of no subject which was less worn out than the free-will controversy. Subsequent events have justified his opinion, and various circumstances, among which the influence of Professor James' polemic is not unimportant, have conspired to bring forward again this world-old problem, and make it at the beginning of our century one of the prime subjects of philosophic discussion. Authoritative announcements that the free-will doctrine has been "shattered" by modern science or that the problem has been "dropped" by modern philosophy have not been wanting, but in the light of recent discussion these seem, to say the least, premature. The writings of Martineau, Bradley, Ward and Royce, not to mention Howison, Mallock and the authors of "Personal Idealism," give evidence of a deep and widespread philosophical interest, and this interest may, perhaps, excuse the present attempt to show how the problem presents itself to the modern scientific and ethical consciousness.

If we go back to Greek philosophy, we find that the free-will question emerged as a problem in ethics. Plato and Aristotle give us no detailed nor comphensive treatment, and perhaps no unambiguous answer. Certain passages in

both writers, however, undoubtedly favor the libertarian position, and here, as has been remarked of Plato, "a psychological decision" is reached "on essentially ethical grounds."[1] In the later moral systems, Stoic and Epicurean, the discussion of the problem became more prominent, and its metaphysical bearings were clearly brought out. The Stoic, though emphasizing the dignity of human nature and the power of man to rise superior to the accidents of fortune, decided against free-will in the interests of a monistic doctrine of fate or providence; the Epicurean, on the other hand, holding that free-will was necessary to the attainment of the highest happiness, sought a metaphysical ground for it in an assumed "declination" in the primeval atoms.

The problem became more acute in the form in which it was raised by Christian theology, which deepened at the same time the sense of guilt and responsibility, and of dependence upon divine grace for all spiritual good. The relation of free-will to the divine attributes of omniscience and omnipotence, to the origin of moral evil and to the administration of divine grace, furnished the subjects of the great theological debate carried on successively between Augustinian and Pelagian, between Thomist and Scotist, and between Calvinist and Arminian.

The roots of modern discussion are to be found in the psychological and psychophysical theories of Descartes, Spinoza and Leibnitz. Its course has been influenced also by Hume's treatment of causation, and most of all by Kant's doctrine of man as a citizen of two worlds, in one of which he is phenomenally determined, and in the other noumenally free. While the free-will question is primarily a psychological one, having to do with the analysis of volition and its relation to the other elements of consciousness, it has come to have important connections with physical science, as well as with

[1] Windelband: *History of Philosophy*, p. 191.

ethics, metaphysics and theology. It may be said that the psychophysical aspect of the question is just now most prominent, and, of course, there can be no adequate treatment of this aspect without taking into account the physiology of the brain and nervous system, the physical law of the conservation of energy, and the biological doctrine of evolution. Underlying the scientific form of the discussion, and lending it zest and interest, are always the deeper ethical and spiritual issues supposed to be involved. In general it may be said that the discussion takes now a wider range than ever before, while its storm-center for the present is the relation between mind and brain. We shall find it convenient to take up first those phases of the subject most closely related to physical science, and shall then consider its relation to modern psychology, ethics and theology.

I

FREE-WILL AND THE PSYCHOPHYSICAL QUESTION

The relation between mind and body is a question now well to the fore in philosophical discussion. There are three generic theories now current, automatism, parallelism and interactionism, and these have historic roots in the speculations of Descartes and his successors. Interactionism is the successor of Descartes' *influxus physicus;* automatism is an application to man of his mechanical theory of animal movement; while parallelism may be regarded as a blending of Spinoza's monistic theory of one underlying unknown substance with two parallel attributes, and of Leibnitz' pluralistic doctrine of monads inaccessible to each other's influence, but mirroring each other's movements in virtue of a pre-established harmony.

Modern theories are often held in a tentative form, subject to modification by epistomological criticism. Kant found in the difficulties which beset alike the *influxus physicus* and the pre-established harmony and the supernatural assistance theories an argument for his own theory of knowledge, and set the question in a new form, "How external intuition is possible in any thinking subject?" To this he replied: "No human being can return an answer."[1] It is usual for recent writers to begin with brain-physiology and physics and to end with the theory of knowledge.

We are concerned with the psychophysical question only in so far as it affects the question of freedom. Two kinds of freedom may here be distinguished: freedom of expres-

[1] *Critique of Pure Reason.* Max Müller's trans., 1896, p. 318.

sion, or the ability to express a volition in bodily movement; and freedom of initiation, or the ability to form a purpose without being determined thereto by purely physiological conditions. The first question is, whether consciousness enters as an efficient agent into the time and space world; and the second is, whether nervous or other bodily processes are at each step of the conscious process its cause or absolutely determining condition.

Interactionism admits both expressive or external, and initiative or internal freedom. Consciousness is able to produce changes in bodily movement, it holds, and *à fortiori* will be able to affect its own course. As to whether this power of self-determination is to be understood in the deterministic or indeterministic sense, interactionism leaves an entirely open question.

Automatism holds that the "materials of consciousness are the products of cerebral activity." The relation is that of one-sided dependence, without reciprocal influence. The pulses of thought follow one another like the sparks from an engine, each pulse being due, not to an influence from the previous pulse, but directly to some movement in brain molecules. Consciousness is thus doubly inefficient, unable even to affect its own course. Freedom in either sense is excluded.

Parallelism, an intermediate doctrine, would explicitly deny any direct influence of mind upon the course of physical events. Whether it would admit any power of initiative, or spontaneity—any freedom from the trammels of mechanical law—would depend upon the extent of the parallelism and upon its ultimate critical interpretation. If there are some psychical processes, as Wundt and Ziehen hold, for which no physical correlate can be found, then to this extent the psychical series is independent of the chain of physical causation, and spontaneity in some limited degree may be

admitted. Again, if the parallelism is finally resolved into a semblance, we have a theory resembling interactionism in admitting for consciousness a certain power of control over its own processes (initiative freedom), and an efficient influence over the other elements of real being (expressive freedom). Parallelism, then, in its immediate bearing upon the question of freedom in these two senses, is more or less non-committal and plastic. In fact, as we shall notice, the ambiguity of parallelism at this point may be urged against its acceptance as an ultimate theory.

As to a libertarian freedom of choice over and above the spotaneity or initiative freedom we have noticed, and supposed to be distinguishable from it, it is enough here to remark that its possibility is denied by automatism and by parallelism in its usual form, and is admitted by interactionism; while direct arguments in its favor must, of course, be found outside the range of psychophysical discussion. Whether it is compatible with any form of parallelism remains to be considered.

A. *Automatism*

The motto of automatism is that thought is the function of the brain, or conversely, that the brain is the organ of mind. The new sciences of physiological and experimental psychology have strongly emphasized the dependence of mind upon the nervous system, and there is no doubt that until very recent years the currents of psychology have set strongly in the automatist direction.

The automatist's motto is supported by many undoubted facts. It has been shown that many of the simpler mental processes are connected with definite portions of the brain cortex, and that diseased brain-tissue causes an impairment of the mental power. In numberless cases of insanity post mortem examination has shown a tumor in the brain, or

some abnormality of brain structure. Physical fatigue dulls the mental powers, and narcotics introduced into the brain change the whole character of the mental life. During sound sleep and in the trance state, to say nothing of the condition before birth and after death, consciousness seems to be wholly intermitted, while its physical concomitant enjoys an unbroken continuity. Automatism again does away with the inconvenient interference of mind in the movements of matter, and so far harmonizes with the complete mechanical explanation of movement for which physical science seeks. Alike in the history of the individual and of the race, the development of mind seems dependent upon that of the body. As in evolution, the inorganic comes before the organic, and in ontogenesis the developed brain comes before consciousness, the law of parsimony leads us to refer the origin of consciousness to the material particles organized in the form of brain-cells, and its processes to molecular movement in the brain. Thus, in its origin and history, and, it would seem, in its destiny, the conscious life is inextricably bound up with matter and its laws. If the self is but a phase of a complicated arrangement of highly evolved matter, the belief in its substantiality, its moral freedom, or its continued existence seems manifestly absurd.

The eclipse of spiritual belief with which philosophy was threatened by the automatist doctrine was fully appreciated by Mr. Huxley, its leading champion, and was thus expressed in a classical passage:[1]

"The consciousness of this great truth [that the physiology of the future would extend the realm of matter and law over the mental sphere] weighs like a nightmare, I believe, upon many of the best minds of these days. They watch what they conceive to be the progress of materialism, in such fear and powerless anger as a savage feels, when, during an

[1] "The Physical Basis of Life," *Fortnightly Review*, Feb., 1869.

eclipse, a great shadow creeps over the face of the sun. The advancing tide of matter threatens to drown their souls; the tightening grasp of law impedes their freedom; they are alarmed lest man's moral nature be debased by the increase of his wisdom."

Mr. Huxley, as is well known, escapes from the consequences of a materialism which, as he says, "may paralyze the energies and destroy the beauty of a life," by covering the materialistic features of his theory with the modest veil of agnosticism. If we know matter as it really is, and further, can perceive in cause and effect, not simply a sequence, but a necessary sequence, he sees no escape from utter materialism and necessarianism. But, he asks, "after all, what do we know of this terrible 'matter,' except as a name of the unknown and hypothetical cause of states of our own consciousness?" This modest disavowal of knowledge of what the brain really is, is not, however, in itself enough to assure us of the efficiency of mind. If the relation of thought, as we know it, to brain, as we know it, is always that of one-sided dependence, agnosticism alone will not suffice to dispel the fatalistic inference. We are not surprised that Mr. Huxley himself felt impelled, doubtless by the advancing tide of matter, to qualify the declaration of his original address that "our volition counts for something, as a condition of the course of events,"[1] by the insertion some twenty years later of the foot-note "or to speak more accurately, the physical state of which our volition is the expression."[2]

Against the automatist's argument in favor of a one-sided dependence of thought upon the brain, and its fatalistic corollaries, may be urged objections from the standpoint of common sense, of morality, and of scientific generalization.

[1] *Fortnightly Review*, 1869, p. 145.

[2] *Collected Essays*, 1892, vol. i, p. 163, note. See Ward, *Naturalism and Agnosticism*, vol. ii, p. 54.

That such a dependence exists at least in the case of sensation, is shown by Mr. Huxley's familiar experiment of pricking one's self with a pin.[1] The pin-prick evidently precedes the pain, and, by a simple application of Mill's "method of difference," is shown to be the cause of the pain. A similar dependence of mental process upon nervous process is declared (contrary to popular impression) to hold in the case of emotion and volition. Interactionism replies that the pin-prick experiment proves, if it proves anything, that there is not one-sided dependence, but reciprocal action between mind and brain. The same reasoning exactly, which shows that the pin-prick is the cause of the sensation, will prove that the volition to make the experiment is the cause of the movement of the hand and arm which follows. It is, of course, impossible at present to show that the volitional brain-movement follows the volition, but it is equally impossible to show the excitement of the sensational brain-centre precedes the pain.

The "dynamic quality of ideas" as shown in the hypnotic suggestion weighs against automatism. The idea of a burn suggested to the hypnotic subject is followed by a real scarification of the tissues, and the result, mysterious at best, becomes wholly unaccountable if we exclude as efficient factors both the thought of the hypnotist and that of the subject.

The antinomy between automatism and morality may be illustrated from Mr. Huxley's Romanes Lecture. In an utterance which has given aid and comfort to the enemies of naturalism he intimated that the "cosmic process" "has no sort of relation to moral ends." "Let us understand, once for all, that the ethical progress of society depends, not on imitating the cosmic process, still less in running away from it, but in combatting it."[2] But moral sentiments, we must remember,

[1] See *Collected Essays*, vol. i, pp. 238–240.

[2] *Evolution and Ethics*, p. 83.

like all conscious processes, are the products of cerebral activity. The brain, then, though its movements are unquestionably a part of the non-moral "cosmic process," generates a moral imperative which commands that the cosmic process be combatted. Apart from this difficulty in Mr. Huxley's system, it needs no argument to show that there is a contradiction between the ethical principles which he so nobly advocates and the fatalistic inferences to which his automatism easily leads.

The physiological postulate of automatism—thought is a function of the brain—is opposed not only by the common sense view of reciprocal influence, but by the leading generalizations of physics and biology. As regards the conservation of energy, Professor Höffding clearly outlines the situation:

"The supposition that a casual relation may exist between the mental and the material is contrary to the doctrine of the 'persistence of energy.' For at the point where the material nerve-process should be converted into mental activity, a sum of physical energy would disappear without the loss being made good by a corresponding sum of physical energy. . . . . .

"Of course, there is always one way of escape—to deny the doctrine of energy. This doctrine is not experimentally proved, and, as we have seen, cannot, strictly speaking, ever be proved. But according to the general rules of methodology, we may not, in forming our hypotheses and judging of them when formed, enter into conflict with leading scientific principles. And in modern natural science the doctrine of energy is such a leading principle. If, therefore, an hypothesis is in conflict with this doctrine, the fact tells at once decidedly against it." [1]

To the argument indicated above, the automatist, so far as we know, has given no satisfactory answer. Automatism, sin-

[1] *Outlines of Psychology*, pp. 55 and 58.

gularly enough, finds in the mechanical view of the world one of its strongest opponents. It cannot hold its ground against parallelism (and has not done so), because parallelism provides for the completeness and inviolability of the mechanism better than automatism. Further, it is not open to the automatist, as it is conceivably to the interactionist, to deny the universality of the law of conservation, or, with Spencer, to correlate mental with physical "energy," because this is to give up the mechanical principle upon which automatism is based. Another of the great generalizations of modern science, the doctrine of evolution, is, we shall find, unfriendly to automatism, but consideration of this point may conveniently be postponed to another chapter.

B. *Parallelism*

Parallelism, as contrasted with automatism, has the advantage of keeping intact the doctrine of the conservation of energy, of avoiding the difficulties of conceiving causal intercourse between matter and mind, and of providing, at least apparently, for a real activity and continuity of consciousness. As the conscious series goes along by itself, according to its own laws, and uninfluenced by the physical series, mind is seemingly endowed with spontaneity and efficiency, at least, within the sphere of its own movement.

When we examine more closely, however, we see that the freedom possible under the theory in its usual form is a vanishing quantity. In the first place, mind can have no influence over bodily action; all the deeds done in the body are determined by physical antecedents, governed strictly by physical law. The purpose of the statesman, the benevolence of the philanthropist, the hatred of the murderer, the ideal of the artist, cannot, strictly speaking, have the slightest influence upon the expression of these mental phenomena in the material world. And, secondly, even in the closed circle of

thought-life there seems no room for any real spontaneity. From the standpoint of brain-movement the conscious process at each step takes its cue from the concomitant cortical process, and as the cortical process is controlled wholly by mechanical law, parallelism in this view, equally with automatism, reduces consciousness to the position of a boat floating "oarless and rudderless" upon the stream of physical change. It becomes simply a passive spectator of its own processes, unable to influence its own course. The difficulties of parallelism as so construed lead many of its advocates (Ziehen, Wundt, Höffding, Paulsen, Stout) to subject it to further criticism, with the result that the physical series is ultimately dispensed with, and some form of "panpsychism" or "critical monism" takes the place of the original parallelism.

As so reconstructed, parallelism allows equally with interactionism for the power both of mental initiative and outward expression. Consciousness becomes the primary and determining factor, and is in interaction with those elements of real being which the physical series symbolizes. Emphasis, we find, must inevitably be laid upon one or the other of the two parallels. If both have an equal footing in reality, we cannot rest in the thought that they are so bound together as to be in constant juxtaposition, and yet so held apart as to be totally inaccessible to each other's influence. We must go back to interactionism, or else we must give one series preference over the other. Ultimately, then, we find that but two species of parallelism are really held, materialistic or epiphenomenist parallelism, and idealistic parallelism. The first makes mind a property or subordinate aspect of matter, "a subjective phase of certain objective phenomena," and is opposed to freedom in any sense; the second regards matter and mechanism as mental symbols of some extra-material and extra-mechanical reality, and leaves the way open for further discussion of the free-will problem.

Overlooking the logical instability in the doctrine, let us look at it in its most general or unmodified form, and compare it in its advantages and defects with the rival theory of interaction. We shall consider briefly: 1. What parallelism means. 2. The question of its extent. 3. Facts in its support. 4. Objections to it.

1. When it is said that changes in the content of consciousness and changes in nervous or brain tissue are "parallel," the assertion must mean (a) that there are features in each series of events which exactly correspond to features in the other series, and (b) that correponding events in the two series occur simultaneously.

So far as the parallelism extends (a question to be afterward noticed) a definite change in consciousness must have a definite change in nervous tissue corresponding to it and *vice versâ*. To the mental changes m_1 m_2 m_3, the bodily changes b_1 b_2 b_3, must exactly correspond.

If at any point in the mental series m_3, the corresponding physical movement may be indifferently b_3 or B_3 (see diagram), the parallelism is broken. For if two different physical events, b_3 and B_3, may indifferently be parallel with m_3, why not a dozen? or to reverse the question, why to a given physical event b_3, may not two or more mental events correspond? If two objects move always in parallel lines (to refer to our mathematical metaphor), the direction in which one moves determines absolutely the direction in which the other must move. In other words, so far as parallelism between brain-movement and thought extends, a competent interpre-

ter observing either series, could translate it with absolute accuracy into terms of the other series.

In time the relation between corresponding events in the two series must be that of exact simultaneity. Let us suppose that the mental state of an angry man about to strike a blow is analyzable at a given instant, into sensational, emotional and volitional elements, and that the complex state has an equally complex correlate in the nervous series. Plainly the total physical event, said to be parallel with the mental event, must be precisely simultaneous with it. If the sensational element of the total mental state *follows* its correlative brain-movement, while the volitional element of the mental complex *precedes* its brain-correlate, the two series do not proceed *pari passu*. The relation between them would be similar to that which exists between the tempo of a circus band and the movements of the waltzing elephant. Again, if conscious changes always follow, by an interval however small, the corresponding brain-changes, the state of the case cannot properly be called parallelism; for the term then will mean the same as automatism, from which it was supposed to be distinguished. If parallelism is to take rank as a separate theory, it must always connote a definite correspondence, and an exact simultaneity between the parallel series.[1]

2. The extent to which consciousness and physical phenomena may be said to be parallel, is a question which concerns primarily the relation between conscious processes and processes in the cortex, or gray matter, of the brain. But even here there may be processes on both sides which find no concomitant on the other. Ziehen holds that there are "numberless material processes of the cortex, which take

[1] Professor C. A. Strong remarks (*Why the Mind Has a Body*, p. 159): "If the interactionist would but admit the simultaneity of the pairs of events, the parallelist would have him at his mercy; but if he persists in holding them to be successive, I do not see how the issue can be decided by any means known to natural science."

place *without* the concomitance of psychical processes." On the other hand, he finds nothing in the brain-process corresponding to the perception of time and space relations.[1] Wundt holds that all organic (including brain) processes have a conscious concomitant, but exempts from the law of physical concomitance, "the more complicated products of our mental life," and "the general intellectual powers which are the necessary pre-supposition of those products."[2] Stout ultimately holds to a complete parallelism on both sides. Every mental and every physical event finds its concomitant in the other series.[3]

Reflection will show that a thorogoing parallelism complete on both sides is the only one which can keep unimpaired the law of conservation, and really exclude mutual influence. Assuming that there are physical events with no conscious correlate, the change in this region may set up change in the region paralleled by consciousness, and so initiate a change in the conscious series. But the conscious change thus begun, having nothing in the previous conscious series to explain it, will either be uncaused (thus denying the causal law), or must be referred to the influence of the physical changes, thus returning to the difficulty of interaction. On the other hand, imagine a philosopher to be so absorbed in speculation about the stars that he walks unwittingly into a well. Here the higher intellectual operations, which we now assume to have no physical correlate, affect the ordinary sensory-motor consciouness, and so by hypothesis affect the character of the concomitant molecular movements in the brain. In this case the nature of brain-activity—if not the amount, at least the direction of motion—is due ultimately to an event which

[1] *Introduction to Physiological Psychology*, pp. 275, 277.

[2] *Human and Animal Psychology*, p. 447.

[3] *Manual of Psychology*, p. 52.

was exclusively mental, and the law of conservation is as much endangered by the incompleteness of the parallelism as it would be by an avowed interactionism.

If we are to safeguard the law of the conservation of energy, in the interests of which the parallelist theory has been adopted, we must assume that every event in the physical world finds its correlate in the mental world, and *vice versâ*. There must be a conscious concomitant of the "concentrating nebulæ" as well as a physical correlate of the "thoughts of poets." Many parallelists shrink from taking up the burden of metaphysical assumption thus demanded, but if they are in earnest about the law of conservation, it is difficult to see how the burden can be avoided.

3. Parallelism claims to find a double support in the facts of physiology and physics. For the proof of the concomitance of nervous and conscious processes it goes to physiology, and for the proof of their "hermetic closure," as regards causal influence, to physics. Strictly speaking, parallelism is lacking in any direct empirical support. Science has shown with increasing clearness and certainty the intimacy of the connection between mind and brain, but has not yet disclosed the nature of that connection. Modern neurology and comparative physiology do not of themselves suggest the parallelist's interpretation, but have supplied a number of facts, both in broader outline and in minute detail, which may be conveniently viewed through parallelist's glasses, and used to support one side of the parallelist's contention —the invariable concomitance of mental and physical action. For the other side—mutual inaccessibility—the disparity of the two sets of phenomena and, in particular, the law of the conservation of energy, are invoked. Parallelism, of course, finds negative support in the difficulties of the other theories. The advantages claimed for it are that it takes account of the facts of physiology and does full justice to the gene-

ralization of physics, avoiding the logical difficulty of connecting disparate phenomena, and that it is of great practical convenience as a working hypothesis.

4. Over against these advantages are some objections which may be briefly noted.

(1) There is a difficulty from which parallelism and interactionism alike suffer, growing out of the inaccessibility to observation of brain-action. There is no empirical proof that all movements in the brain are due to mechanical causes, nor is there evidence that all psychical events have exact physical correlates. Analogy from the principle of the "summation of stimuli," before a conscious effect is produced, suggests the possibility of mental processes so faint as to be without brain-influence. Again, the complexity both of the mental processes and of brain activity forbid at present the coördination of the two with any degree of exactness. An ideal empirical proof of parallelism would consist in a complete analysis of a complex mental state and the exhibition of corresponding features in the complex of associated molecular brain-movement—an almost hopeless task to an observer to whose view both the cerebral process and the mental process were completely open. But, at present, it must be acknowledged, *we do not know what takes place within the brain*. That there is always some activity of the brain in some relation to consciousness is the common opinion of all schools, but we do not know in exactly what part of the brain, if not all, this related activity occurs, nor, in the appropriate part or parts, do we know in what precisely the activity consists. This is an objection to the provability of parallelism, rather than to its truth.

(2) Some facts of brain-physiology tend at least to *disprove* the parallelist assumption. A thorogoing localization of brain-functions, while consistent with other theories, would be favorable to parallelism. Some of the freaks

of memory favor the view that each word, or even letter, has its exact pigeon-hole in some brain-cell, and the capacity to reproduce words by speech or writing is found to be destroyed by lesions in definite areas of the cortex. Motor centers, also, have been mapped out with much definiteness in the case of animals, and approximately in the case of man. When we come to the higher intellectual functions, however, we are left more in doubt. Many physiologists here deny localization altogether, holding that the entire hemisphere is active. Some (the phrenological school) locate the intellectual functions in the frontal lobes, others (Carpenter, Bastian, Hughlings Jackson[1]) in the posterior lobes. Says Professor Loeb: "Experiments on the brain indicate that while there exists to a certain extent an anatomical localization in the cortex, the assumption of a psychical localization is contradicted by the facts. . . . .

"This agrees [referring to the experiments of Goltz on dogs] with the idea that in the processes of association the cerebral hemispheres act as a whole, and not as a mosaic of a number of independent parts."[2]

We are then unable to say with certainty how extensive is the brain-activity assumed to accompany a given thought, or in what part of the brain it is located. Sir M. Foster, speaking of the phenomena shown by animals with parts of the brain removed, says "we cannot fix on any linear barrier in the brain or general nervous system, and say 'beyond this there is volition and intelligence, but up to this there is none.'"[3] The failure of localization would leave us in the dark as to the nervous concomitants, say, of love and hate, and in the present state of physiological doctrine we should

[1] Hollander: *Mental Functions of the Brain*, p. 24.

[2] *Comparative Physiology of the Brain*, p. 262.

[3] *Text-Book of Physiology*, 1897, p. 1081.

be shut up to crude speculation of the "right-hand-spiral-motion" and "left-hand-spiral-motion" order.

The phenomena of psychical supply (*suppléance*) or "vicarious functioning" are certainly a stumbling-block to parallelism. As in a factory where division of labor exists, one skilled laborer may, on occasion, take the place of another, so, within limits, the functions of lost parts of the brain are gradually assumed by others. Here the conscious activity, when regained—the sensation or motor impulse—is essentially the same as before, while the associated brain-movement is entirely different; and this is true whether the original brain-correlate was definitely localized, or was a coördinated activity of the entire cortex. We have to conclude that a given conscious process can take place equally well with either of two essentially different physical concomitants, thus doing away with the exact correspondence which parallelism demands.

(3) When we compare the two sets of phenomena and observe their difference, it is as hard to believe in exact correspondence between the two as in their causal interaction. The subjective accentuation of rhythm, while possibly capable of a physical explanation, may be a case in point. "The very time-rhythm of psychical processes does not immediately follow the nervous processes, even when these are rhythmic, as in the case of reflexes."[1] The arrangement of our sense-perceptions under the forms of time and space, the logical activities of comparison and inference, and the "synthetic unity of apperception" are mental operations for which a proper physical correlate is difficult to conceive. One series is subject to quantitative measurement, and its energy is constant in amount. The other has no exact quantitative character, but, so far as quantitative terms may be applied to it, its knowledge may grow from more to

[1] Rhiel: *Science and Metaphysics*, p. 186.

more, and its progress in morality be indefinitely advanced. The suspense and delay of deliberation, the power of postponing reaction to stimulus, is contrary to all that we know of purely physical or automatic action. The interval which separates stimulus and reaction, where deliberation intervenes, is inexplicable on the theory that the brain has a purely automatic action, "uninfluenced by states of consciousness." The great difference, in short, between the two associated processes is that one is mechanical, the other teleological, and the task of parallelism is to show how the two processes, while so different that they cannot interact, are yet so much alike that one can be perfectly correlated with the other. Certainly the differences mentioned weigh as heavily against a theory of exact concomitance as against one of interaction.

(4) Both series fall into discontinuity when mutual influence is denied. Whence comes the sensation of light? Not from the sun or the electric current, according to parallelism, for these physical phenomena do not influence the world of consciousness. Not from anything that we knew of in the previous state of consciousness, for of the coming sensation we often have no premonition. The obvious explanation is denied us, and we are compelled to suppose, "that it is not the physical stimulus which occasions the sensation, but that this latter arises from some elementary psychical processes, lying below the limen of consciousness."[1] Even so we are left in doubt whether these hypothetical "elementary processes" belong to the individual consciousness, or to the consciousness-in-general which is supposed to parallel the world of organic or physical movement.

A similar gap is left upon the physical side when mental influence is denied. Paley's illustration of the watch may be

[1] Wundt: *Human and Animal Psychology*, p. 450.

antiquated as an argument for design in nature, but it is hard to believe that the purpose of the designer had no effect in the production of the watch itself. If "the brain has an automatic action uninfluenced by states of consciousness," the purpose of the engineer had no direct influence upon the construction and form, for example, of the Brooklyn Bridge. We must substitute in this case the causality of certain elaborate brain-processes which accompanied the engineer's planning and calculation. But the correspondence between the mental purpose and its realization in the completed structure is so exact and impressive that the efficiency of the former must in some sense, be admitted. The bridge as it stands shows purpose unmistakably. It cannot be the result of a "fortuitous concourse" of materials. If efficiency be denied in the case of the engineer's purpose, then mental efficiency must be brought in further up the stream, and the exact correspondence between engineer's purpose and material bridge must be due to a harmony pre-established by cosmic intelligence. "If the concomitance of cortical and conscious processes is regarded as an ultimate principle, it is simply a miracle."[1]

Sober parallelists do not assert that either process would go along by itself if unaccompanied by the other.

$$\left.\begin{matrix} A \\ a \end{matrix}\right\} - \left\{\begin{matrix} B \\ b \end{matrix}\right\} - \left\{\begin{matrix} C \\ c \end{matrix}\right\}$$

A B C, the physical series.
a b c, the conscious series.

In the accompanying diagram, the physical term *A* would not be followed by *B*, unless *A* had its psychical concomitant *a*. *A* alone then would not produce *B*, while *Aa* would do so. How then can *a* be excluded from causal influence? It is an indispensable antecedent of *B*, an essential condition,

[1] Stout, *op. cit.*, p. 51.

and we have as little right to exclude it from causal efficiency as we have in case of the other condition *A*. It is not held, on the other hand, that in the search for a word or name, the psychical series could go along unaccompanied by physical concomitants. The conscious event *b*, the recalling of the word, occurs only if it is preceded by *Aa*, for if the appropriate cortical centre is extirpated memory is destroyed. How, again, we ask, can *A*, an essential and indispensable antecedent, be denied causal participation in the production of *b*?[1] For certain purposes the series *ABC*, or the series *abc*, might be treated as independent; but in either case there would be yawning gaps to fill.

It must be noticed, in passing, that the facts of intersubjective intercourse become doubly mysterious on the principles of parallelism. The only known avenues of knowledge and communication, through gesture, touch and sound, are by hypothesis barred at both ends. Instead, as a channel of communication between different minds, is substituted a "system of immaterial agency," supposed to parallel the physical world. A piece of circular reasoning seems to be involved in this assumption. The strongest, if not the sole, evidence we have for the existence of any such immaterial system is the belief in other minds. Yet we get at the other minds, in the way of knowledge and influence, through the medium of their bodies.[2] How, then, can the belief in other minds, so reached, be made the premise of an argument for the existence of an immaterial system underlying the physical world as "thing in itself," and taking the place of the body as a link of intercourse and influence between minds?

(5) The opponent of parallelism might stake his whole

[1] These remarks were suggested by Bradley's criticism of automatism. *Appearance and Reality*, pp. 327–329.

[2] So Bradley, *op. cit.*, p. 255. And see Ward, *op. cit.*, Vol. II., p. 239.

case upon the bare fact of knowledge. Both the physical and the psychical series are equally objects of knowledge, otherwise there would be no question of the two parallels. But knowledge, however interpreted, involves an influential relation between the knower and the thing known. According to natural realism, the world of perception is a real external world, which is the cause of the perception. If the physical world is purely phenomenal, the relation is reversed, and the world becomes the effect of mental activity. If behind physical phenomena there is an unknown x, or thing-in itself, then this x is in interaction with mind in producing phenomena. If, finally, the physical world (including brain and nerves) is nothing more than "perceptions, actual or possible," as phenomenism asserts, then, corresponding to a perception in the mind of A, there would be no brain-event except a possible perception in the mind of a hypothetical anatomist B; and this perception, if it occurred, would not be simultaneous with A's perception, and, besides, there would be but one class of reality—mental.

Parallelism is then reduced to this dilemma: Either the physical world, supposed to be parallel with mind, is only a fact of consciousness; or, if outside of consciousness, it is either a real world directly known and so in influential relations with consciousness, or it is an unknowable thing-in-itself, also in influential relations with consciousness in the production of phenomena. In any case the parallelism of two mutually exclusive series vanishes.

It is no wonder that a dualism of two series of events, at once in closest union and completest separation, is so unstable that it dissolves at the touch of epistemological criticism. The difficulty, of course, arises from the attempt to coördinate or place in exact and detailed correspondence two disparate sets of facts, one to be construed under the category of mechanism, the other under that of teleology. One

category or the other must ultimately control both series, and the outcome will be a belief in a one-sided dependence of mind upon matter (materialistic parallelism), or of matter upon mind (idealistic parallelism). Historically a mechanical principle, that of the conservation of energy, has been given the preference by the framers of the parallelist hypothesis. The law of conservation *must* be inviolate in the physical sphere, and the laws of the conscious process must accommodate themselves to the requirements of an exact concomitance. On this rigid construction, parallelism, for the purposes of our discussion, differs little from automatism. The mental life, looking always to the mechanical series for the cue of its own activity, cannot be said to have any real spontaneity or real activity of its own. Consciousness is thus practically reduced to the position of "epiphenomenon," and if materialism be disavowed, we have the familiar puzzle of a phenomenal world known by its epiphenomenon or shadow.

If stress be laid upon the mental side, and consciousness be endowed with a real power of control over its own processes, mechanical explanation of the physical series will inevitably be incomplete. If the mental life is not tied down to mechanical conditions, its spontaneity will inevitably infuse into both parallels an influence which is foreign to mechanical law. If the stream of consciousness goes along in accordance with laws of its own, then the physical concomitants take their exact form in virtue of their necessary correlation rather than because of purely physical conditions. The physical world is in some way plastic to conscious purpose, and provided that the mind can initiate its own action, the volition is a significant and essential condition of the physical change, for without it the precise physical movement would not have taken place. Bound to the wheel of mechanical causation by the link of inevitable concomitance, consciousness

can be prevented from controlling the mechanism only by being itself rendered impotent. If it has no freedom of expression, it has no freedom of initiation. If it is not a real cause in the physical world, it must be merely an effect of physical action. We conclude that to attempt to safeguard the interests of the conservation of energy in the physical world, and at the same time to preserve for consciousness the power of controlling its own action, is on parallelist principles hopeless. If we exclude miraculous intervention, which is as hostile to an inviolable mechanism as is the influence of human purpose, parallelism is confronted with the alternatives: either mind is not wholly dependent upon brain-movement, with the corollary that mind does influence brain-movement; or if it has no influence over brain-movement, it has no control over its own states.

Many popular expositions of parallelism seek to do justice to the claims both of mechanism and of mental prerogative by first arranging the facts in two coördinate and mutually exclusive series, and then reducing the parallelism to a semblance by showing that the physical series has only a phenomenal or symbolic, that is mental, reality. The theory is thus thought to be freed from its fatalistic tendencies. The mind, in this reconstruction, is released from the trammels of the mechanism with which it had been coördinated, and recovers both its power of self-activity and its power of free interaction with the elements of real being, of which the physical world is but the phenomenal symbol.

This solution is attractive, but it is doubtful if fatalistic corollaries are thus wholly avoided. The mere fact that the life of thought and volition can be thus exactly correlated with mechanical action will favor a determinism of the mechanical sort in spite of the idealistic interpretation of the mechanism. But the main question here is whether the character of mental and physical action is such that this exact cor-

relation is possible. If two courses are open to the volitional process, as libertarianism holds, then the placing of the process in relation of exact correspondence, point for point, with a nervous process by hypothesis "unideterministic" is impossible. We have tried to show that if mental activity is, in the strict sense, to proceed *pari passu*, with purely mechanical movement, not only freedom in the libertarian sense, but any real spontaneity or power of mental initiative must be denied. If pure mechanism is the law of either series, it must control the entire psychophysical process.

It seems also a fair criticism that the idealistic reduction of parallelism, in the interests of mental efficiency, involves an undue shifting of metaphysical standpoints. The brain is first not only treated as an entity, but credited with certain varieties of movement which, we believe, there is no empirical evidence that it possesses, and some evidence that it does not or even cannot possess, in order to fit it to parallel completely every process and every detail of every process of the conscious life; and then, presto! it is reduced to a mere possibility of perception, with only a hypothetical or symbolical existence. If the parallelism so carefully made out and so elaborately buttressed on both sides with metaphysical assumption is finally to be reduced to a semblance, would it not be better to disclaim dualism at the outset, and confess that the whole question lapses?

C. *Interactionism*

To have scientific standing, interactionism must show (1) that conscious processes may be construed in terms of energy, and so correlated with physical energy as to be included within the general law of the correlation of forces;[1] or (2) that interaction is not inconsistent with the principle of

[1] So Spencer (*First Principles*, pp. 225–226) and the *Energetiker* in Germany. See Hibben, "The Theory of Energetics, etc., *Monist*, vol xii, no. 3.

conservation[1]; or (3) that this principle is so limited as to be inapplicable at the point of supposed interaction. Of these forms of interaction the last seems most easily defensible. It does not with (1) assume a relation of equivalence between incommensurable phenomena, nor with (2) attempt the apparently hopeless task of reducing something to nothing. The doctrine of conservation was intended originally to be a formula to express the correlation or equivalence of physical forces—for example, that a given amount of work done would generate an exactly equivalent amount of heat, and that this heat, under suitable conditions, could be changed back again into an exactly equivalent amount of mechanical energy. That the amount of physical energy in the world remains constant is an empirical generalization from these facts; it is not by any means an *à priori* truth, nor was it intended to settle the problem of the relation of mind and matter. In fact, it has left the problem much where it found it. The doctrine of energy simply brings up in a special form the fundamental question of the causal relation between mind and body. Descartes' difficulty was with the quantity of motion. He thought that the soul could not generate nor retard motion, but simply change its direction; and it is instructive to remember that the theories of interactionism, occasionalism, one-substance-with-parallel-attributes, and pre-established harmony, were thrashed over in philosophy before the energy-conservation doctrine was formulated. If one holds *à priori* that mind cannot act on matter, nor matter on mind, the scientific principle in question will not prove that to himself or others, although it will enable him, it must be admitted, to express his belief in a more impressive manner. It is the notion of interaction itself, not the law of conservation, which makes the trouble. The fundamental prob-

[1] For proposed methods of conciliation, see Couailhac, *La Liberté et la Conservation de l'Energie.* Paris, 1897.

lem for the interactionist is, How can mind and body act and react on each other? and not, How can such interaction be reconciled with the conservation of energy?

To the objection that we cannot conceive how consciousness can push or pull atoms, we may reply *ad hominem* that we cannot conceive how any transeunt action takes place. Still it must be conceded that the case in point presents peculiar difficulties. Quantitative relations exist among the correlated physical forces, but this does not exclude causalty from regions where quantitative relations are inapplicable. Causal relations may exist between elements of the mental process, or between two minds, or between stimulus and sensation, where no quantitative proportionality can with exactness be ascertained. Again, the conviction that friction was the cause of heat was just as firm before the numerical correlation of cause and effect was established, as after.[1]

A more effective reply might be that the difficulty of admitting interaction is less than the difficulty of denying it; in short, that parallelism makes more difficulties than it removes. This is the point to which our remarks have been directed. We may believe that body acts upon soul, and conversely, that

> "— of the soul the body form doth take,
> For soul is form, and doth the body make,"

even though we cannot picture to ourselves the mode of reciprocal action. That the inconceivability of the mode does not apply to the fact of such action, is shown by the common opinion of mankind, including philosophers in their unguarded moments, and by the working hypothesis, for example, of physicists and experimental psychologists, when investigating the relation between atmospheric waves and sound.

[1] See Sigwart: *Logic* (E. T.), vol. ii, p. 385.

The causal principle is essentially synthetic. It is used to unify the facts of our experience; and the arbitrary diremption of the two parts of the world of experience, even in the name of the causal principle, cannot logically be justified, and is a thought in which the mind cannot permanently rest. The relation between stimulus and pain, or between volition and movement answers Hume's requirement of invariable antecedence, and the causal connection may be established by Mill's canons of induction. That one link in the chain, the brain-movement, is inaccessible to observation, is not enough to invalidate the causal inference. If the essence of causation be regarded as real agency or efficient action, then surely in our experience of voluntary movement, we gain the clearest knowledge of such agency. Our very conception of physical energy seems derivable from our experience of acting and being acted upon, and if causal agency or efficiency be here denied, it should, in consistency, be excluded from the world altogether. Interactionism, it may be claimed, does not make void the law of causation; it rather establishes the law.

We may continue to believe as before that, when we form plans and purposes, and then, after what we call an effort of will, find them realized in the movements of our bodies and in the physical world, the purpose and its realization are causally related. In our examination of psychophysical theories, we have found no sufficient reasons for giving up the conviction that we have power on ourselves and on the world. For the interpretation of this conviction we must look, of course, to psychology proper, to ethics and metaphysics.

II

FREE-WILL AND EVOLUTION[1]

TWO recent books of somewhat similar title illustrate two different views which may be taken as to the relation of evolution to the free-will problem. The author of the *Riddle of the Universe*,[2] declares that the superstition of free-will, together with belief in the two other "buttresses of mysticism," God and immortality, has been shattered by the doctrine of evolution; while the author of *Guesses at the Riddle of Existence*,[3] declares that "the deduction," from evolution to the negation of free-will, "supposing it logical, would be fatal surely, not to free-will, but to evolution."

The general process of evolution as a process of change or progress, covering both natural and human history, may be regarded, according to the standpoint from which the process is viewed, as pointing to and culminating in the production of a free moral personality, or as making the person a purely natural product, devoid of any permanence or other prerogative which would raise him above nature. If we start from homogeneous matter, or primordial living germs, and emphasize the law of continuous development, the ascription to man of powers which raise him above the course of nature will seem to be excluded. The tendency of our thinking will obviously be towards mechanical determinism.

[1] A fuller examination of the general theory of evolution has been attempted in an article in the *Princeton Theological Review*, July, 1903.

[2] Haeckel. See p. 92.

[3] Goldwin Smith. See p. 210.

If, on the other hand, we lay stress on the law of progress, the change from lower to higher forms of life, we may find in the evolutionary process much that favors a belief in freedom. 'Evolution involves,' so the indeterminist might argue, 'a continuous change from simpler to more complex forms, from lower to higher potencies of life. There is the change in time from the inorganic to the organic, from the unconscious to the conscious, from the non-moral to the moral. In each case the lower sphere is both transcended by the higher and incorporated in it. May it not be that the realm of mechanical necessity is transcended by the realm of freedom? In fact, is not such a transcendence what the whole course of development tends to suggest?

'The plant overcomes the mechanical law of gravitation as it turns toward the light. The amoeba detaches itself from its environment and has a certain power of movement. The spider weaves its web, the ants move and mold inorganic matter in building their nests. Higher animals, as the beaver, make more striking changes in their environment. Finally, man, "the lord of creation," standing at the summit of organic evolution, though he is partly subject to his environment, and dependent upon it for life, yet shows an incalculable power to change it and mold it to his own uses. He exterminates the larger animals who dispute his possession of the earth, or tames them to be his servants. He covers continents with the products of his civilization, and changes the face of the earth. He wages warfare, more or less successful, upon the tendencies he has inherited from the brute, and struggles to

> "Move upward, working out the beast,
> And let the ape and tiger die."

What shall we call the process thus sketched if it is not the evolution of freedom?'

It is quite apparent that our interpretation of evolution will depend upon the presuppositions which we bring to that interpretation. If inclined to believe that the mathematical-mechanical view of the world is the most fundamental, we may find in the evolutionary philosophy a powerful ally. On the other hand, if we believe, on psychological or ethical grounds, in the efficiency of mind and moral freedom, we may, as has been suggested, find much in the evolutionary process to support that belief.

Three points in the evolutionary theory are of interest in relation to the free-will problem: 1. the origin of consciousness; 2. the importance of the conscious factor in organic development; 3. the place of the genius or great man in social progress.

Of these points the first two are concerned with the question between mechanical determinism and the personal theories of the will, rather than with the fine points of the discussion between psychological determinism and indeterminism. The consideration of both may be brief, as they carry us back to the subject of our last chapter. If consciousness can be shown to have been derived from unconscious matter, automatism and mechanical determinism will be the natural inference, and evolution will furnish the necessarian with an effective weapon. On the other hand, if consciousness can be shown to be an efficient factor in organic development, to have "survival value," interactionism and expressive freedom at least will be favored.

1. The attempt to derive the conscious from the unconscious is rather discredited in the thought of to-day. Added to the obvious logical difficulty is the objection to causal intercourse between the two spheres noticed in the last chapter. If we believe, with Tyndal, that "the passage from the physics of the brain to the corresponding facts of consciousness is unthinkable," even when brain-process and conscious

process are both given, the difficulty of conceiving how such a transition took place in the first instance is, if possible, heightened. It is one thing to say that brain-change can influence conscious processes—this the interactionist must admit; but it is quite another thing to say that physical movements can in the first instance produce or generate consciousness. The problem is to explain how any motion of thoughtless atoms, however complicated, can produce thought, or how any "integration of matter and dissipation of motion" can give rise to consciousness. Mind is an intruder in a world conceived in terms of matter, motion and force; and the production of the conscious from the unconscious, of mind from matter, when these terms are used in their obvious meaning, is a logical *generatio æquivoca*.

There are several possible ways out of this difficulty. The most obvious would be the materialistic solution, that consciousness is itself a mode of motion, a view that is not now in popular favor. Mr. Spencer's theory of "conscious energy" and its correlation with physical forces tends in this direction, but he, of course, disavows the materialistic name and teaching. In recent statements of the evolution theory, there has been an attempt to give a more adequate account of the development of mental life. To say that evolution is true as a universal law, and therefore all the processes of mind are derived ultimately from the clash of atoms, is to ignore the fact, as Professor Baldwin remarks, that "mental facts are an important province for the establishment of general evolution."[1] The principle of continuity in development, moreover, is better satisfied by the assumption of consciousness in the lower forms of life, than by the logical feat of deriving it from the unconscious.

"The problem of the origin of consciousness," says Mr.

[1] *Senses and Intellect*, p. 105.

F. W. Headley, "puts us on the horns of a dilemma. Either consciousness is present in the lowest forms of life or else it was introduced at a higher stage of development. The latter alternative is abhorrent to the very principle of evolution. We are driven, then, to believe that even the micro organisms, whether animal or vegetable, have some consciousness, however dim."[1] There is no doubt that this account of the evolution of mind has become more or less metaphysical. Consciousness is assumed where there is no evidence that it existed, in order to account for consciousness when it actually appears. The logical gap is filled up by a metaphysical assumption.

The appearance of mind may be coincident with the appearance of life,[2] and then the question of the origin of mind is merged in the wider question of the origin of life; or consciousness may be regarded as an invariable aspect of all matter; or as the reality—"mind-stuff"—which matter symbolizes. Conceived in this rudimentary form, the word consciousness is somewhat "eviscerated" of its meaning, and may, in fact, approach infinitely near (though it never reaches) the limiting term "matter." The problem then becomes to trace the evolution from primitive "mind-stuff" to developed human consciousness, and is the same as that which meets us in all attempts to account for the higher in terms of the lower. The elements with which we started, and the finished product to be accounted for are often unconsciously assimilated, certain properties of the latter being transferred to the former. The homogeneous, although simply considered it would remain homogeneous, is endowed with instability to account for the diversity of things, and we have, as Dr. Ward says, "the philosophy of Heraclitus deduced from the prem-

[1] *Problems of Evolution*, p. 155.

[2] Romanes, Baldwin. See the latter's *Mental Development*, pp. 208–214.

ises of Parmenides."[1] In the ancient form of evolution atoms were allowed a "swerving" movement, in order to account for free-will, and in a modern form "matter" is said to contain "the promise and potency of all terrestrial life," and is endowed with attributes of intelligence and almost of creative power.

To examine closely the various theories of the origin and development of mind would carry us too far. It may, however, be confidently urged that there is nothing in the scientific form of the evolution theory which compels us to limit the attributes of any order of being—say, the living or the conscious or the moral—to the predicates which belong to a lower order of being. The very idea of a progressive development is in harmony with the poetic insight, that

"Man hath all that nature hath, but more."

Evolution is sometimes identified with a certain kind of monistic philosophy which on *a priori* principles excludes free-will, or even real personality, from the universe. But evolution, as most evolutionists will agree, is more than a mere continuous change, without order and without end. The process of which evolution takes account is a rational process and involves a real progress in the scale of being. Progress, however, is an essentially teleological conception. It involves intelligence or purpose at both ends—an intelligence by which the progress is appreciated, and doubtless, also, unless the progress is purely subjective and illusory, a cosmic purpose of which progressive development is the expression. It would be illogical to hold to a progressive tendency in development, and at the same time to deny in the

[1] *Op. cit.*, vol. i., p. 245. Lotze (*Metaphysics*, § 227) says: "It is impossible to deduce difference from a single homogeneous principle, unless we have a group of minor premises to show why the one principle should necessarily develop *a* at one point, *b* or *c* at another."

name of evolution the power to form purposes and realize them in the world. There can be nothing antithetic between evolution and the prerogatives of personality, unless evolution be regarded as not only a non-moral but an irrational process, without value and without aim.

2. The place and function of mind in evolution is, at present, a vexed question both in biology and psychology. There is, as we have seen, the question as to the exact point in the process at which consciousness made its appearance; but, passing over this, the question remains as to what influence, if any, it has exerted upon the development of the organism. Has it a "survival value"? To the latter question, plainly, the interactionist will say "yes," and the automatist will return a positive, and the parallelist a qualified, "no."

In the automatist theory all states of consciousness, whether sensations, emotions or volitions, are alike the "products of cerebral activity." When we experience what we call a volition, the movement of which we think this to be the cause, has already been started by the appropriate nervous mechanism, and consciousness is powerless either to initiate or to inhibit organic movement. To the question of the origin of consciousness the automatist can have but one answer. Consciousness in the first instance, as in its developed stages, is the direct result of a certain arrangement of molecules, and is "generated" by them. But why was consciousness evolved? The most obvious answer is—because it was useful to the organism. If it be replied that it was a chance variation, then the question becomes: Why was that variation perpetuated by natural selection? And the answer is the same as before. If not useful to the organism, consciousness, given its chance appearance, would, like the eyes of the fish in Mammoth Cave, have been atrophied or eliminated by natural selection, rather than preserved and devel-

oped. That consciousness should be evolved out of the organism, say, when complicated reactions become necessary to its proper adjustment to environment, and yet have no selective function; that it should be not only preserved by natural selection, but developed into instinct, deliberation, far-seeing choice and intelligent purpose, and at the same time remain a useless appendage, powerless to affect either the organism or the environment, is more than we can believe, even on the authority of so good a biologist as Mr. Huxley.

It may be confidently said that the victory on this point rests with the interactionist as against the automatist, and so far favors the influence of consciousness. It must be noticed, however, that parallelism is favored by an influential school of biologists. The prior question is of course as to the relation between consciousness and movement in human experience, and if causal influence here be denied, the denial must be extended to the entire realm of organic movement. Yet it must be noticed that biology presents some peculiar difficulties to the parallelist. Denying, on the one hand, that consciousness can be an evolved product of the unconscious, he is obliged to push back the origin of consciousness behind the point where there is empirical evidence that it exists; and denying, on the other hand, that consciousness is an efficient factor in organic development, he is obliged to say that where it does exist, it does not influence survival. This paradox is illustrated in an interesting article by Professor Titchener, in which parallelism is defended from a biological standpoint.[1] Holding that we have evidence in the history of the individual of conscious movements becoming unconscious (as in learning to walk, etc.), but none of the reverse process, Professor Titchener draws

[1] "Were the Earliest Organic Movements Conscious or Unconscious?" *Popular Science Monthly*, March, 1902.

the general inference that all organic movements were in the first place attended with consciousness. He says: "The fact, then, if it be a fact, that ants and bees are nowadays mere reflex machines (as is held by many biologists), will mean that they have started out, so to say, with a certain endowment of mind, which they have lost in the process of adaptation to their special environment; and the similar fact that paramecium has its one stereotyped form of motor reaction to stimulus will mean that it, too, had at first its modicum of mind, which it has lost on its journey through the ages." [1]

Surely the theory that a primitive consciousness is needed to explain organic movements, and that its continued use is necessary to prevent these movements from becoming "stereotyped," is a strange basis for the parallelistic conclusion that consciousness does nothing to further organic progress. It seems, on the contrary, to favor the interactionist's contention, as Professor Titchener himself formulates it, "that the function which is psychophysical helps the organism onwards, on that account, more than the function which is physical; that consciousness, just because it is mental process, furthers life and progress." [2]

Into the discussions as to the original causes of variation and the inheritance of acquired characters, it will not be profitable for us to enter. We may remark simply that the essence of the Lamarckian theory is that consciousness is the cause of organic variation. "The production of a new organ in an animal body results from a new want arising and continuing to be felt, and from the new movement which this want initiates and sustains." [3] On the other hand, the extreme Darwinians, who do not, with Darwin himself, recog-

[1] *Loc. cit.*, p. 465.

[2] *Ibid.*, p. 459. The whole article should be read.

[3] Quoted by Ward, *op. cit.*, vol. i, p. 273.

nize such conscious factors in evolution as sexual selection, deny that consciousness has a survival value. To the Darwinians of this type, who hold that all variation is chance variation, the origin of the highly complex instinct of animals becomes a problem. On this point Professor H. W. Conn has lately said: "It is frankly admitted that to put the burden of explaining instincts upon natural selection alone, unaided by intelligence, is to lay upon it a load too heavy for it to carry. This is admitted even by those who feel that they cannot use the inheritance of acquired character to help them out of the difficulty."[1]

The present state of biological discussion seems not unfavorable to interactionism. It may be said that the biological argument has had serious consequences for automatism; that at present Neo-Darwinians tend strongly toward parallelism, and Lamarckians toward interactionism, and that the tendency of intermediate thinkers (if an opinion may be ventured) is toward larger recognition of the importance of a conscious factor in evolution.

In general (to sum up the two points already noticed), we find that an evolutionary philosophy which traces all forms and potencies of life to forces resident within the primordial germ, or the primeval atoms, is favorable to a necessarian theory, which finds the conditions of voluntary activity exhaustively contained in previous collocations of matter, or at least, in traits and tendencies which are handed down by heredity. On the other hand, in recent discussions of the evolution problem, three points, not unfavorable to a libertarian belief, are observable. The attempt to show that consciousness has been evolved from the unconscious is now generally discredited; the efficiency of consciousness as a factor in organic evolution is widely recognized; and, it may be added, the gap between animal and human intelligence has

[1] *The Method of Evolution*, p. 275.

been widened rather than filled by the recent studies of animal psychology.[1] Biology has not spoken the final word upon the free-will problem, but, as might have been expected, has left it to be decided on the evidence of psychological investigation and moral conviction.

3. In the application of evolutionary principles to the historical sphere, the question of the place and influence of the world's great men in social progress becomes important. If the powers and capacities of the great man are wholly derived from heredity and environment, he becomes a purely social product, with no power of initiative which can be regarded as his unique and personal possession. If, on the contrary, there is in the great man, as Professor Royce argues that there is in every individual, an element peculiarly his own, not to be accounted for by general laws, then the great man is a very real factor, and it may be a prime factor in social progress. The separable questions of the relation of the great man to his ancestors (heredity), and to his environment, may be conveniently merged into the general question of his relation to his age.

The genius can of course work only with the material which he finds ready to his hand. He must employ the language and methods of thought prevalent at his day, and can advance only a measurable distance beyond his contemporaries, or like a captain too far in front of his company, he will lose touch with his comrades, and his work will remain without influence. The relation of the great man to his environment is so close that it is possible at each step for the evolutionist to say to him: "What hast thou that thou didst not receive?" The greatness of a general does not consist in his independence of his army, but in his ability to use and direct his army. The hero-worshiper will give the credit of victory

[1] See, for example, E. L. Thorndike: "The Experimental Method of Studying Animal Intelligence." *International Monthly*, Feb., 1902.

to the genius and valor of the general; the evolutional historian to the state of military science, to favoring circumstances and to the collective qualities of the soldiery. As in all cases where the cause is complex, one element in it or another may be emphasized as the really important factor; and it seems to be a question of taste whether we emphasize the individual contribution which the great man makes to progress, or reduce it to a minimum. Mr. Spiller, for example, sees in Shakespeare a product of his time. "He only accepted the torch which was handed him."[1] Again, "Shakespeare's dramas, like his sonnets, are so largely indebted to his environment that, by comparison, his own contribution, a very real thing, shrinks into utter insignificance, a ripple on a mountainous wave."[2] Sir Oliver Lodge takes a quite different view. "What struggle for existence will explain the advent of a Beethoven? What pitiful necessity for earning a living as a dramatist will educe for us a Shakespeare."[3] On one theory the great man is merely an evolved product; on the other, an original moving force in social evolution.

It may be shown that Shakespeare used the vocabulary, the poetical forms, the methods of dramatic construction, common to his contemporaries. "It is superfluous to mention that we do not owe the drama to him. Similarly, the blank verse which he employed he found ready made," etc.[4] But it is not in these points that originality is claimed. These are merely *externalia*—form, not spirit. It is in the use which he made of the popular dramatic form that his claim to originality lies, and here the whole race of literary critics, Mr. Spiller complains, unite in the estimate of a late authority, Mr. Lee: "To Shakespeare the intellect of the

[1] *The Mind of Man*, p. 387. [2] p. 393.

[3] "The Reconciliation Between Science and Faith," *Hibbert Journal*, vol. i, no. 2.

[4] *Op. cit.*, p. 388.

world, speaking in diverse accents, applies with one accord his own words: 'How noble in reason! how infinite in faculty! etc.'" [1] To the literary critics the work of Shakespeare rises above that of his contemporaries as Mont Blanc above the other Alps; to Mr. Spiller, as "a ripple on a mountainous wave." The question is plainly one to be decided by the canons of æsthetic appreciation, rather than by the methods of exact science. That Shakespeare used in his work the forms of expression and the dramatic methods and historical material which were the common property of himself and his contemporaries, is surely no sufficient reason for transferring the credit for his work from himself to the account of his contemporaries, or to that of an impersonal *Zeitgeist*.

The view referred to accounts for Shakespeare's work mainly through the influence of social environment. Another way of discounting the personal factor would be to say that both the poet's endowments, and the use which he made of them, were wholly the gifts of his ancestry; but what little is known of the Shakespeare family history would rob the view, in this case, of plausibility. The influence of heredity is the deterministic argument most commonly urged in the name of evolution. Can man, through the exercise of the will, overcome or modify the dispositions with which he was born, or is every thought and act controlled by them? This is really the psychological question of the relation of volition to previous tendencies and habits, and is best discussed in the form, When conflicting motives arise, is man able to choose either one of them, or is the choice inevitably determined in advance by previous tendencies to action? In default of psychological analysis the question can only be determined by noting similarities and differences between parents and offspring. That children "take after" their parents and

[1] *Op. cit.*, p. 389.

grandparents is a fact of common observation, but the exceptions are so numerous and puzzling that no sweeping deterministic generalization is on empirical grounds justified. Technical discussion of the facts of heredity throws doubt also upon the validity of a deterministic argument founded upon them. If acquired characters are not inherited, then the thoughts and actions of ancestors do not wholly control the thoughts and actions of descendants. The only way a determinism of heredity can in this case be made out is to hold that each individual's habits of thought and action are absolutely determined by the "continuity of the germ plasm"—a doctrine so hopelessly materialistic that it will not find ready acceptance.

The facts of social evolution, we conclude, do not support the deterministic creed, unless we argue in the familiar circle, "It did happen so, therefore it must have happened so." Sociologists may and, in fact, sometimes do use the argument that social phenomena must be subject to law, or there can be no science of society, but this is to make determinism a postulate of sociology, rather than an inference from social phenomena.

III

THE CONSCIOUSNESS OF FREEDOM

FREEDOM in willing may be denied, as we have seen, on the ground that volition is related to brain-movement, either as necessary effect (automatism), or as inevitable accompaniment (materialistic parallelism); or because the volition of the individual is determined by the volition of his ancestors. Added to these forms of determinism, which may be called the psychophysical and the evolutional, there is a determinism based on purely psychological grounds. The denial of free-will may be reached as the outcome of an analysis of volition itself, or of the relation of volition to other elements of mental content, or by a failure to find any permanent center of activity or self, of which freedom may be predicated. All the arguments for determinism are expressions, in different ways, of the theoretical demand for the universality of causation. If A be chosen instead of B, there must be some reason for making that particular choice, and this reason, whether it be found in a state of the brain, or in the volitions of ancestors, or in the constraint of a prevalent motive, is an antecedent condition which determines the choice as certainly as any physical cause determines its effect. All the arguments for determinism are but different applications of the causal principle to volition.

The positive arguments for indeterminism are practically reducible to two. The first is the so-called consciousness of freedom, "the immediate affirmation of consciousness that in the moment of action we are free." The second belongs to ethics, and is, that freedom of choice is a necessary pre-

supposition for the interpretation of the facts of our moral nature. It is the conviction, in Professor James' words, "that what ought to be can be, and that bad acts cannot be fated, but that good acts must be possible in their place."

The psychological argument for free-will is the so-called consciousness of freedom, or the consciousness of a selective and directive power in virtue of which we may, within limits, control the course of our thinking and our conduct. It is imperative to get as clear an idea as possible as to what the testimony of consciousness really is. Does the "consciousness of freedom" mean that we are outside of prison walls, and out of the clutches of the law (absence of external restraint); or that we cause our own actions (spontaneity, so-called); or that we might have done otherwise in the circumstances ("power of alternative choice"); or that we can do anything we please, for example, jump over the moon? It will be generally agreed that it means this much at least, that in the formation, and consequently in the realization, of our purposes, we, as psychical individuals are causally efficient. In its feeling of freedom consciousness does not testify that the individual is a *causa sui* in the sense of having the ground of his existence in himself, or that thought and bodily action can be independent of the laws of thought and of gravitation. It does testify, however, that the individual is really an actor rather than a passive spectator in the game of life, that his actions are determined *by* him and not *for* him by something outside of his own personality. We may at least safely say that consciousness testifies to a *conative freedom*, meaning by this that the sources of the individual's life of effort and striving are to be found within the circle of his own conscious life.

If the feeling of causative power is an illusion, as the mechanical determinist must hold, it remains to be explained how the illusion arises. The most notable attempt in this

direction is that of Professor Münsterberg's *Willenshandlung*. In this monograph the feeling of self-activity accompanying acts of "external will," terminating upon the movements of the body, and of "internal will," terminating upon the course of our thoughts, is recognized, indeed, as the essential thing in volition, but the will is nevertheless resolved into a complex of presentations or sensations.[1] All spontaneity or causal efficiency is thus eliminated. The will is "phenomenalized," that is, reduced to atoms of "conscious phenomena;" and the residuum in case of voluntary movement is a memory-image of a former movement, the "kinæsthetic idea," followed by the sensations of the movement actually made. We come to believe in a causal connection between the anticipatory idea and the movement simply because of the priority of the idea to the sensation of the movement. The memory image becomes the "constant signal of the movement."[2]

This account is accepted by Professor Loeb in his recent treatise on "*The Physiology of the Brain*." He says: "The will is only a function of the mechanism of the associative memory. We speak of conscious volition if an idea of the resulting final complex of sensations is present before the movements causing it have taken place or have ceased."[3] When a given brain-center is stimulated there is a double effect; a reflex current going down the motor nerve and producing the movement, and an innervation of the memory-center corresponding to the idea of the movement. There is thus the memory-image of the movement, and later, the muscular sensation of the movement when actually made,

[1] "The will is only a complex of sensations." It is a name for a group of sensations (*Empfindungen*) only distinguished from other sensations by its complexity and constancy. *Willenshandlung*, p. 62.

[2] p. 145.

[3] p. 216.

but no causal connection between the kinæsthetic idea and the motor nerve current. Professor Loeb remarks:

"As we do not realize this any more than we realize the inverted character of the retina-image, we consider the memory effect of the innervation as the cause of the muscular effect. The common cause of both effects, the innervating process, escapes our immediate observation as our senses do not perceive it. The will of the metaphysician is then clearly the outcome of an illusion due to the necessary incompleteness of self-observation."[1]

The union of an automatic theory of movement with a sensational psychology which "phenomenalizes" the will is not uncommon, and is in fact inevitable. If the bodily mechanism is self-sufficing, the will must be reduced to impotence, or really to non-existence. Professor Münsterberg's explanation of the illusion of personal agency is not easily applicable to acts of "internal will," and it has the fatal objection that in breaking the connection between purpose and its fulfillment in the mental sphere, it robs the thinking process of all continuity. Besides, the theory is applicable strictly only to cases of single-motived volition. Where there is a weighing of motives, the suspense of deliberation, the simple formula of anticipatory image followed by experienced sensation, does not explain the whole process.[2] As is well-known, the author himself recognizes the inadequacy of his theory as an account of our concrete experience. "We do not feel ourselves such conglomerates of psychophysical elements, and the men whom we admire and condemn, love and hate, are for us not identical with those combinations of psychical atoms which pull and push one another after psychological laws. We do not mean,

[1] *Op. cit.*, p. 216.

[2] For fuller criticism of the theory, see A. Seth: *Man's Place in the Cosmos*, ch. iii; J. E. Creighton: *The Will* (Ithaca, 1898).

with our responsibility and with our freedom in the moral world, that our consciousness is the passive spectator of psychological processes which go on casually determined by laws, satisfied that some of the causes are inside of our skull, and not outside."[1]

The inadequacy, even for psychology, of an account of volition which reduces it to a complex of sensations is pointed out in a recent treatise.[2] From the standpoint of the "idea psychology," Miss Calkins finds three features in ordinary volition over and above a mere anticipation of the result to be obtained. There is (1) an idea of the future, linked with the antecedent image as the idea of the past is with a simple memory-image; (2) a feeling of realness—what we will, we will to be real, and (3) a consciousness of the linkage of the particular image with future reality.[3] But even when the analysis is carried thus far, the author confesses, it "must strike every one as a little forced and artificial." "Will is a consciousness of my active connection with other selves or with things, an imperious relation, a domineering mood, a sort of bullying attitude."[4] Again, in the account given of deliberation, it is said: "It must be added that the accounts of deliberation, formulated in terms of the psychology of ideas, are far less convincing, that is, less adequate, than descriptions of deliberation as opposition of distinct tendencies of a self. Such doctrines of conflicting ideas often, indeed, win their credence, because we unconsciously add to the conception of alternating ideas the more fundamental one of warring self-activities."[5]

In any account which may be given either of the "will to

[1] *Psychology and Life*, p. 16.

[2] *Introduction to Psychology*, by Mary Whiton Calkins.

[3] pp. 300–301.

[4] p. 307.

[5] p. 319.

know" or of the "will to act," the sense of personal activity and agency cannot, we believe, be eliminated except at the expense of psychological truth. When it is explained as illusory by an appeal to the psychophysical mechanism, thought itself is inevitably reduced to a mechanical process.

The real psychological question concerns not the causal connection between purpose and its fulfillment, but the connection of volition with what precedes it in consciousness—in short, the relation of volition to motives. At the moment I feel that I can remain seated or rise from my chair as I choose. So much all admit. But the determinist often limits the consciousness of freedom to a consciousness of power to act out the choice already made. I can read this book if I choose, or that magazine if I choose, but there is no freedom of choice in the sense of a power of alternative choice—only a freedom of action in accordance with the choice which is, as it were, a given element. But of two equally customary and appropriate actions, I not only feel that I may do this or that, if I happen to choose the one or the other, but I feel, as I deliberate, that I can throw the weight into either scale, that it is in my power either to choose this or to choose the other. Back of this choice, as I take it, consciousness does not go. It may possibly be that consciousness, like a floating iceberg four-fifths of which is below the surface of the ocean, is absolutely determined in its choice by the steady set of subliminal tendencies rather than by the shifting winds of conscious motive; but of this, if it be true, our conviction of freedom at the moment of decision gives us no sign.

Most determinists[1] admit the consciousness of freedom in

[1] But not all. Professor Thilly, for example, complains that the libertarian "is apt to throw into this consciousness of freedom his entire doctrine, thereby garbling the facts to suit his theory." (*Introduction to Ethics*, p. 334.)

the sense here indicated, but reject the testimony as illusory. The effort to explain how the illusion has arisen furnishes an interesting chapter in the history of thought. We feel free, it is said, because we are ignorant of the causes by which our desires are determined, or ignorant as to what the result of our deliberation is to be. A wealth of illustrations is used to show how necessity is compatible with the feeling of liberty. Spinoza's classic illustration is of the stone consciously endeavoring to persist in its proper motion. Bayle speaks of a weather-vane desiring to turn east while the wind blows from the west, or of the needle passionately aspiring to take the direction of north to which it is drawn by magnetic attraction.[1] Or as the hypnotic subject always obeys the hypnotist's orders, so all men, though acting under the illusion of freedom, are really only obeying inevitably the suggestions of the great hypnotist Nature.

M. Guyau, in an acute discussion,[2] is prodigal in explanations, giving at least three. The first is the illustration of the dog in leash, whose preference happens to coincide with the will of its master; secondly, "No one can ever foresee with absolute certainty what we will prefer to-morrow"; and, thirdly, "We can never . . . conceive of an action as impossible, for the mere conception of the action makes it possible; hence we are necessarily free in our own eyes." Again, following M. Fouillée, he says: "The idea of liberty determines us to act as if we were free."[3]

None of these explanations wholly satisfy. We are ignorant of the causes and of the future condition of a good many things of which we do not predicate freedom.

[1] See A. Joyau: "*La Liberté Morale*, p. 39.

[2] *Education and Heredity*, pp. 61–64.

[3] p. 87.

The stone would no longer be a stone nor act as a stone if endowed with consciousness and desire,[1] and no dog in leash ever perfectly obeyed without constraint its master's wishes. Again, the consciousness of freedom in the presence of alternatives is different from the conception of the possibility of different actions. It is the conception of ability rather than of mere possibility, which goes with that of freedom.

M. Fouilleé, seeing that the consciousness of freedom cannot be wholly irrelevant to subsequent action, makes it a dynamic idea, an "*idée-force*." The idea of freedom is one of the complex of ideas determining our volition. But in the moment of deliberation, the idea of freedom attaches alike to both of two actions, thought of as alike possible. It is not then in itself sufficient to determine the decision between them. It is true that belief in our ability to perform an act makes the performance of it easier and more probable, as Professor James has urged in his *Will to Believe*, but this confidence in our ability is often reached as the result of volition—of voluntary attention—before it becomes a factor in the final decision. As M. Fouillée himself says; "Given, a system of forces however great, the idea of freedom (*liberté*), always present in myself, enables me to conceive a force still greater; and if I put this idea to the test I can succeed. . . . I can always, in virtue of the idea of freedom, pass from one force to another still greater; I have only to continue this movement to obtain the degree of force necessary to each action."[2] The idea of liberty can apparently, in this exposition, be used at will to increase our power of acting, but it remains doubtful whether the use we make of it is predetermined or not. If there is no real liberty in the use

[1] Cf. Ladd: *Philosophy of Conduct*, pp. 154 f.

[2] *La Liberté et le Déterminisme*, pp. 241–242.

we may make of the idea of liberty, the illusion and the failure to account for the illusion remain as before.[1]

Over against the consciousness of freedom on the psychological side may be placed the analysis of volition into a conflict of motives with a resulting prevalence of the strongest motive. The points of this well-worn discussion may be briefly indicated.

When Bassanio chooses the leaden casket or Shylock the pound of flesh, it is easy to say that, given the circumstances of the case and the character of the men, the idea of these objects had for the respective choosers a certain inherent power, which caused them to be chosen to the exclusion of competing ideas. Why is one of two competing motives chosen? The simple answer is, that it was the strongest motive. By motive we must here mean the idea of an object or action which claims the attention and solicits the will, and which, in the absence of competing ideas, would "stably prevail" in thought and issue in appropriate action. To say that the motive which prevailed is the strongest motive, may be simple tautology. It was chosen because it was chosen. If the statement means more than this, it must mean that previous to the decision and fiat which terminated the conflict, the motive which prevailed had, as related to the mind of the chooser, a certain inherent efficiency or power, which secured for it inevitable victory over other ideas, seeming to dispute with it the possession of the field.

That ideas of movement have a certain dynamic character, a certain tendency, in the absence of inhibiting factors, to get themselves expressed in movement, there can be no doubt; but this is far from saying that their action is mechanical, like the impact of one billiard ball upon another, that the outcome of conflicting motives is in any sense com-

[1] Delbœuf declares that "the illusion of freedom is as inexplicable as the fact of freedom." "Determinisme et Liberté," *Revue Phil.*, xiii, p. 463.

parable to the "resultant" of two physical forces differing in direction. "Physical causation presents us no analogy to the selecting, intensifying, abbreviating and synthesizing activity of attention."[1]

Analogy drawn from vital phenomena may be used to describe the selective activity of attention when no special effort is put forth, but where a certain idea, for instance that of a disagreeable duty, can be attended to and held in mind only by an effort, vital analogies are as inadequate as those drawn from physical phenomena. We surely feel in the case suggested that the amount of effort in attending to the idea can be increased or diminished, in other words that more than one possibility of thought or action is open to us. The testimony of consciousness in such cases seems unmistakable, that we not only put forth effort, and so cause our own actions, but that over and above the simple reactive consciousness there is a power of attending with effort through which the time and direction of the reactions may be altered. If there is such a power at the centre of personality, it plainly transcends the spheres of mechanical or vital reaction, and so is not statable in purely mechanical or biological terms.

"The question of fact," says Professor James, "in the free-will controversy is . . . extremely simple. It relates solely to the amount of effort of attention or consent which we can at any time put forth. Are the duration and intensity of this effort fixed functions of the object, or are they not? . . . It *seems* as if the effort were an independent variable, as if we might exert more or less of it in any given case."[2]

Granted that consciousness testifies to the power of choosing between presented motives, its testimony cannot be finally accepted until we answer the question, Who or what is it

[1] Baldwin: *Feelings and Will*, p. 371.

[2] *Principles of Psychology*, vol. 2, p. 571.

that is felt to be free? If there is no self "irresolvable into motives," there is no self to choose between motives. "If there is no ego, I cannot, of course, be conscious of myself; and if I cannot be conscious of myself, I cannot be conscious of myself as free."[1] Underlying the question of freedom is the question whether there is a permanent unitary center of thought, feeling and volition.

Kant made his conviction both of the freedom and the reality of the self, except as a bare logical subject, a postulate of the moral imperative, "I ought." There is no doubt that in my moral relationships, in the claims which I make upon others and in the duties which I acknowledge toward others, I have an intense feeling or conviction of my own personal reality and separate identity. But while this conviction is, perhaps, at a maximum in moral experience, it is not necessary, as Dr. Ward suggests, to wait for the moral imperative *I ought* to disclose the practical *I can*."[2] Not only in moments of moral emotion but in moments of purposeful activity we have an unmistakable certainty of ourselves as the real actors. The self is felt to be a center of activity or spontaneity, standing in influential relations with the other constituents of reality. Says Mr. A. Seth: "In the purposive 'I will' each man is real, and is immediately conscious of his own reality. Whatever else may or may not be real, this is real. This is the fundamental belief, around which skepticism may weave its maze of doubts and logical puzzles, but from which it is eventually powerless to dislodge us, because no argument can affect an immediate certainty."[3]

In the very processes of thought we have also a vivid consciousness of the thinking subject as active in appropriat-

[1] Momerie: *Personality*, p. 86.

[2] *Naturalism and Agnosticism*, vol. ii., p. 190.

[3] *Two Lectures on Theism*, p. 46.

ing, selecting, rejecting, its object. If all our beliefs were accepted ready-made there would obviously be no test of truth, just as if all actions were of the reflex order there would be no room for moral distinctions. Without the power in the intellectual sphere of holding the judgment in suspense, of doubting, or weighing and reflecting, there would be no science nor philosophy. Not only would man be the measure of all things, but each belief would be the measure of itself. There would be no distinction between truth and error—no body of knowledge

" won from the void and formless infinite."

While *Ago ergo sum* is a useful supplement to the Cartesian argument, yet the latter retains its force unless the mind be regarded as a passive intellectual spectator, a mere pensioner on outward forms, and the *I think* be conceived as a mere flow of ideas from which the sense of personal ownership and agency is eliminated.

But can the immediate conviction of self which we have in moments of activity be called by the name of knowledge? Is it not rather a sort of mystical feeling to which no definite idea corresponds, and which does not attain to the clearness and definiteness which would entitle it to be called an object of knowledge? For our purpose here it is indifferent whether the intimate conviction and certainty of selfhood which comes to us especially in moments of purposeful activity and of intense emotion be called knowledge, or belief, or conviction, or feeling, so long as it gives certitude of the existence of a permanent and identical self. Of necessity the knowledge, if we may use the word, of the self that knows is different from all other knowledge, because more immediate, but for that very reason more certain. As soon as we begin to analyze the living self, its life has vanished. We look for the self in some pure thought or conation, or

emotion, but it is none of these, because it unites them all and is the presupposition of all.

Mr. Bradley has shown us the difficulty of attaining to a definite and self-consistent conception of the self. The self, according to him, is "a mere bundle of discrepancies."[1] The idea of activity of any kind is "riddled with contradictions,"[2] and the self, being what it is, is not able to bring order out of chaos. The real trouble with the idea of the self is that it combines diversity and unity, and "we cannot reach any defensible thought, any intellectual principle, by which it is possible to understand how diversity can be comprehended in unity."[3] Yet Mr. Bradley admits that "the self is no doubt the highest form of experience we have, but, for all that, is not a true form. It does not give us the facts as they are in reality; and, as it gives them, they are appearance, appearance and error."[4]

It must be remarked that while "appearance," being in Mr. Bradley's system a predicate of the Absolute, is always an appearance *of* something, it is not in the case of the self an appearance *to* anything. Other one-sided appearances, like goodness, truth, etc., may be appearances to a self, but to whom or what is the self an appearance—or even an error? Another self, below this apparent and erroneous self, is, of necessity, assumed, as that to which this illusory self can appear, and it seems a just criticism on Mr. Bradley's position that in holding "the highest form of experience we have" to be "not a true form," he is undermining his own work, and destroying the value both of his criticism of the world of appearance and his construction of a "spiritual Absolute" in which appearances are transcended.

[1] *Appearance and Reality*, p. 120.

[2] p. 115.

[3] p. 119.

[4] *Ibid.*

Mr. Spencer has recourse also to the riddles of Zeno to discredit knowledge of self, and then adds: "A true cognition of self implies a state in which knowing and known are one . . . So that the personality of which each is conscious, and of which the existence is to each a fact beyond all others the most certain, is yet a thing which cannot truly be known at all: knowledge of it is forbidden by the very nature of thought."[1] The recognition of the self as "a fact beyond all others most certain," might more properly lead to an expansion of the meaning of knowledge so as to include this fundamental certainty, rather than to a relegation of self to the limbo of the unknowable after this somewhat empty compliment has been paid. It is a stock complaint against Mr. Spencer's system that we know only what we are less certain about, while what we are most certain about we cannot know.

It may be useful to treat the mental life from an impersonal standpoint, and to banish the soul as "a metaphysical surplussage, for which psychology has no use." (Wundt.) The self is then found nowhere, though really present everywhere, because we have tacitly agreed to ignore it. But a psychology without the soul must at best be a mere simulacrum of real experience, alike on its theoretical, its conative and its emotional sides; and as many voices now unite in protesting, it must be supplemented by a philosophy, if not a psychology, written from the standpoint of concrete personal experience.

The self of which freedom is predicated is admittedly the great mystery. Yet it may be known as the ocean is known, while we have never sounded its depths. It is never presented as a mere object among the other objects of know-

[1] *First Principles*, pp. 65–66.

[2] See, for example, Professor Ormond's presidential address, *Phil. Rev.*, vol. xii, no. 2.

ledge; yet in our thinking and purposing and striving, in our action and passion, in the claims which we make upon others, we are more certain of its existence than we are of anything else. It can be repudiated only at the cost of discrediting all our knowledge. It may be so mysterious that its conception seems to be riddled with contradictions, yet its banishment from the world of reality involves the deeper contradiction of knowledge without a knower. Nor is the self a purely logical subject—the *I think* of apperception which gives unity to knowledge. The *I will* of purpose, the *I love, I suffer* of emotional experience, the *I ought* of the ethical demand, supply it with content, and show it to be the center in which thought, volition and emotion are blended. The self cannot be snared in its own web. Whether we deduce it from an absolute principle, or empirically trace its descent from lower forms of conscious life, or analytically resolve it into a bundle of sensations and ideas, the self remains the logical *prius* and the real actor in all its theorizing activities.

IV

FREEDOM AS ETHICAL POSTULATE

HERCULES at the forks of the road is not a specially impressive figure unless, in the choice of the path which he shall take, there are moral issues involved. If turning to the right means following the line of least resistance and choosing a life of ignominious ease for one of heroic endeavor, then the situation becomes interesting and the decision momentous. To the mind in which the struggle between the solicitations of the lower life and the call of the higher life takes place, two roads seem to be alike open, two courses of action to be alike possible. To the mind of Hercules, in the situation supposed, there was, we may imagine, no thought or suspicion that inherited tendencies, previous habits of choice, or outward circumstances had determined in advance the issue of the struggle. Defeat and victory were to him, we must suppose, alike *present possibilities*, and he felt himself surely to be more than an interested spectator, waiting, perhaps, with breathless eagerness for the issue of the conflict. He felt, we may say, that he held that issue in his own power—that he could crown himself as victor, or weakly fall in his own defeat. Here, then, is the moral argument for freedom of will. It is the belief that two possibilities are open, and that it is in one's power to make either one or the other actual, which makes duty imperative, adds point and meaning to the sentiments of self-reproach and self-respect, and lends interest and intensity to the moral struggle. It is the same belief, as a postulate in the minds of others, which conditions the feelings of indig-

nation and approbation, and the public expression of praise and blame in civil and social institutions. If the free-will problem were concerned merely with the abstract possibility of alternate modes of action, without being so intimately wrapped up with our moral sentiments and convictions, it might have furnished an attractive field for the exercise of scholastic subtlety, but would never have been, as it has been, one of the great battle-grounds of thought.

If man were a perfect being, never knowing the stings of remorse, the humiliation of moral weakness, nor the glow of righteous indignation at the faults of his fellow-men, it is possible that life might be reduced to a sort of "seraphic insipidity," but, at any rate, a hypothetical power to turn aside from the path of right would be regarded as a possession of doubtful value. "I protest," said Mr. Huxley on one occasion, "that if some great power could agree to make me always think what is true and do what is right, on condition of being turned into a sort of clock and wound up every morning before I get out of bed, I should instantly close with the offer. The only freedom I care about is the freedom to do right; the freedom to do wrong I am ready to part with on the cheapest terms to any one who will take it of me."[1]

In our present estate, as we know too well, the case is very different, and the important question is not whether we can do wrong—this we know already; but whether, in a given case, we can do right. The determinist, if he is to remain a determinist in the full sense, must hold that where inclination is followed rather than duty, there was no possibility, under the circumstances, of any other course. In fact, inclination and duty as motives are both parts of the psychic mechanism, and both their presence as motives in the mind and the prevalence of one over the other are the inevitable and predetermined result of a character or temperament which comes

[1] *Collected Essays*, vol. i, pp. 192, f.

to a man ready-made, and of circumstances over which he has no control. "The action," says Professor T. H. Green, "is as necessarily related to the character and circumstances as any event to the sum of conditions."

If man's preference and choice and even his thoughts, the objects which he attends to, the ends which he proposes to to himself, and the intensity of his effort to bring those ends to pass, are the inevitable outcome of past experiences and endowments and present environment, as "necessary" as is the fall of a stone when unsupported to the ground, then, surely, the freedom that remains is very limited. Of a man whose actions are not only influenced but determined by his past, we speak as having lost his freedom. He becomes the "slave of his passions;" in the judgment of charity, the "victim of circumstances;" in any case, below the level of the normal moral individual.

A natural history of volition discribes it as the reaction of the empirical self upon environment. If, with a given stimulus, a certain result—just this result and no other—inevitably follows, it seems to be a matter merely of verbal preference whether you ascribe the result to the external (physical) factor, or to the internal (psychical) factor. There is the same "necessity" about the result whether you choose to regard the physical conditions as cause, ignoring psychical conditions, or whether you regard the psychical conditions as cause, ignoring the physical conditions. The determinist insists that he feels no compulsion or restraint, no necessity in acting as he does. He simply declares that his choice was not made at haphazard, but was the result of all the conditions. No more, it may be replied, would the stone in falling to the ground, or the tree in growing toward the light, feel any compulsion or necessity if endowed with with consciousness, yet the movements of stone or tree if accompanied by consciousness would not thereby be brought into the category of moral action.

What, then, we ask, is meant exactly by the spontaneity or activity of self, which the determinist predicates of it? It must be more than a mere capacity of movement in reference to stimulus, more than a mere "activity generally," for "a mere activity generally must act equally in all directions; must act equally in favor of or against any movement or doing, and neutralize itself."[1] It must be a capacity for acitvity of a certain character, which ensures that a definite and unique response would be given to a definite stimulus, and that successive responses would be modified by those previously made. Each response is then in a sense determined by those which precede it and determines those which follow it, but it is as certainly the result of the nature with which it started as the turning of the plant toward the light. How can moral character or responsibility be attributed to that which is so exactly describable in terms commonly believed to exclude morality and responsibility? How can a man be reponsible for actions which are absolutely determined by the diposition with which he was born (through no will of his own), and the physical and social environment in which he is immersed (through no will of his own)? It may be replied that he is endowed with a power of self-activity. But a power of activity in itself has no moral character, and if a being endowed with it has no alternative as to the time in which it shall be exercised, or the channel in which it shall be directed, it seems inappropriate to ascribe to such a being moral attributes. Character becomes synonymous with temperament. It may be very beautiful or very repulsive, and call forth admiration or disgust, but the heat of moral indignation and the glow of reverent approval are alike out of place. If the whole truth of the matter is that man's character comes to him ready-made, so to speak, at birth, and only unfolds inevitably according to certain laws, we miss from human life the very

[1] Hazard, *Freedom of the Mind in Willing*, p. 248.

element which gives meaning to moral distinctions, value to the moral ideal and significance to the moral struggle, and conditions the possibility both of the tragedies and triumphs of the moral life.

To the argument that free-will is a necessary postulate of morality, the determinist may bluntly reply, as he has done in exceptional cases, "So much the worse for morality." The more usual and more effective reply is that determinism is not only (1) consistent with morality, but is (2) essential to morality. In the former part of this reply, as we have already noticed, the determinist pleads that we are not under compulsion or restraint, that we can do as we please, that we cause our own actions, and therefore can properly be held responsible for them. In this contention that his theory is consistent with responsibility, the determinist is on the defensive. He may simply assert, on the testimony of consciousness, that we feel that we are responsible, thus playing into the hands of the indeterminist, who also appeals to consciousness; or he may seek to modify the meaning of responsibility so as to make it compatible with his theory; or may turn the tables upon indeterminism by insisting that determinism is essential to responsibility. Sometimes at this point an antinomy is acknowledged. "This seems to be an antinomy of the practical reason. Responsibility, an unquestionable fact of consciousness, is not possible on the supposition that the will is free, or that it is not free."[1] Professor Rhiel acknowledges that to treat responsibility together with freedom as illusory—"to give up resposibility in view of the necessity of all action"[2]—would be the easiest way out of the dilemma. Shrinking, however, from this conclusion, he attempts to adapt the conception of responsibility to deter-

[1] Rhiel: *Science and Metaphysics*, p. 239. The chapter quoted illustrates all the forms of reply noticed above.

[2] p. 240.

ministic postulates by explaining this conception as a social product. "Responsibility," he says, "is a phenomenon of social ethics, and as such it is to be explained by social psychology."[1] We are not responsible to ourselves, but to society. Responsibility is the reacting judgment which proceeds from the community in which we live, on the social results of our action, and farther on its motives.[2]

The argument for the social origin of the feeling of responsibility, admitting its validity, seems in this connection beside the point. The social judgment, of which the individual self-judgment is the reflex, undoubtedly imputes demerit to the offender and merit to the good citizen. If it is correct in this imputation, the argument for freedom as the implicate of responsibility still holds; while if it is incorrect, the social judgment which imputes merit and demerit is mistaken, and the individual reflex, the sense of personal responsibility is illusory—the conclusion our author sought to avoid. That there is more, however, in our feeling of responsibility than a response to the actual judgments of society, Professor Rhiel himself shows: "If we feel ourselves responsible for the disposition that remains hidden from our fellow-men, we put ourselves in thought before an ideal community or an ideal person, who, we imagine, knows our motives and approves or condemns them."[3] But here again the responsibility which we feel to an ideal self, or to an ideal community or person either implies free-will, or our feeling of responsibility for our inward thoughts is illusory, and these lose all moral character. Over against the thesis, "Moral responsibility demands freedom, in order that an act may be good or bad," may be placed the antithesis,

[1] p. 242.

[2] p. 244. So also, in substance, Müffelman: *Das Problem der Willensfreiheit in der neuesten deutchen Philosophie*, Leipzig, 1902, p. 2.

[3] *Ibid.*

"Moral responsibility demands necessity, that an action may justly be attributed to a person"; but the thesis can not be disproved on its own ground merely by showing the social origin of responsibility.

The argument is often transferred from the subjective ground of the felt responsibility for personal action to the objective ground of criminal jurisprudence. How can the law hold the criminal responsible, it is said, unless he had the power not to have committed the crime? The arguments here are mainly a repetition of those already reviewed. If the criminal acts are in all cases the inevitable result of the nervous organization with which the criminals were born, the so-called criminals are unfortunate, not guilty. They have drawn the bad numbers, while we—the virtuous—have drawn the good numbers. Perhaps it is the social organization which irresistibly leads a certain individual to commit a certain crime. Then society as a whole becomes the real criminal, and it is a foolish weakness to be indignant at the individual wrong-doer. *Tout comprendre c'est tout pardoner*, because there is no fault to pardon. Punishment cannot be justified, but no more can it be condemned, for as a reaction of society against injury it is as inevitable and as devoid of moral quality as the original crime. "Sacred rights of the individual" there are none, because the individual, without ability to act otherwise than he does act, has no responsibility to society. Collective despotism and the destruction of political liberty would be, it is claimed, the logical outcome of a deterministic criminology.[1]

The indeterminist holds that there can be no moral responsibility and no rational ground for our moral sentiments, unless there is at some time in normal experience a real capacity, independent of environment and inherited tendencies, of success or failure, progress or regress, in the moral life. If a per-

[1] *cf.* Joyau: *La Liberté Morale*, p. 65.

fectly definite stimulus *must* give a perfectly definite reaction, it makes but little difference for ethics whether the reason assigned be the nature of the stimulus or the "spontaneity" of the subject. In either case there is no possibility of acting differently, nor even the small consolation of a possibility of not acting at all. The necessity of heredity, or inherited character, is as inexorable—no more so, but as much so—as the necessity attributed to physical causation. Should the determinist disclaim the doctrine of necessity the fatalistic inferences disappear; but so, if the disclaimer is genuine, does the historic difference between himself and the indeterminist.

Determinism has in reserve, however, a positive ethical argument of its own—that determinism is essential to morality. If an act is to be moral, and one to which moral responsibility can attach, it must, it is claimed, be a true expression of the character of the agent. Unless a given act is definitely determined by previous dispositions and habits, it does not bear the stamp of the agent's personality, and he should not be held properly responsible for it. A power of alternative choice, the contention is, is really a power of unregulated or irrational choice, and confusion is introduced not only into the physical but into the moral order. Once more, if certain motives presented to a given mind have no sure and definite effect, the labor of the educator and reformer is useless, and reason is dethroned in favor of an irrational chance as the guide of life. "It is evident," says Comte, "that improvement by education supposes the existence of requisite predispositions, and that each of them is subject to determinate laws, without which they could not be systematically influenced."[1]

To the indeterminist's charge of fatalism, in short, the determinist replies with the counter-charge of fortuitism, or hap-

[1] Quoted by Hollander: *Mental Functions of the Brain*, p. 359.

hazard chance. Thus Professor Fullerton declares: "I view with horror the doctrine that the teacher's desk and the pulpit, the force of public opinion and the sanction of law, are of no avail. I am unwilling to assume without evidence that each man's breast is the seat of uncaused and inexplicable explosions, which no man can predict, against the consequences of which no man can make provision, and which set at defiance all the forces which make for civilization."[1]

If free-will would involve these absurdities, if it would "pull down the cardinal principles of ethics, politics and jurisprudence" (Fiske), if it would "pervert the entire order of nature in continually increasing extents" (Riehl), and "set at defiance all the forces which make for civilization" (Fullerton), it is justly anathematized by these authors. The conclusion that it would do so is founded on two assumptions: (1) that, on the admission of free-will, previous habits of choice would make no difference in the frequency and intensity with which a certain motive would appeal to a given mind; (2) that a power to choose between alternatives means motiveless and causeless choice. Let us examine now these assumptions in order.

(1) Suppose the motives which could appeal to a certain individual to be arranged in a scale of ascending moral worths represented by the letters of the alphabet. At a given moment, let us further suppose, there is presented to his mind the choice between C and D, with the possibility of his choosing either. If he chooses C, not only will the probability of his choosing C as against D in future be strengthened, but there will be a tendency for D to drop out as a really influential motive altogether, and to be replaced by B. The opposite result will follow if D be chosen, and the next pair of alternatives will be D and E, lower in the scale. In this case we would have what the determinist de-

[1] "Freedom and 'Free-Will,'" *Popular Science Monthly*, Dec., 1900.

mands, a close relation between past habits of choice and present influences to action. Yet the present volition would not be hopelessly and irrevocably bound to the past, and there would be at every step the possibility of further moral advance or retrogression. The illustration is, of course, very crude, but it is merely intended to show the possibility of admitting freedom in a real sense while excluding the absurdities referred to. The man of proved integrity is not as likely to steal as the professional burglar, because the idea of tapping his neighbor's till never occurs to him, or if it should happen to cross his mind, is so foreign to all his habits of thought that it is instantly banished. We recognize here that an important truth underlies the determinist's polemic. When we are occupied with the ordinary routine, or the mind is relatively passive, the dominant motives are doubtless those which have been adopted in the past, and it may be admitted that past habits of thought and action will determine what motives will really solicit to action. It is, then, the prerogative of the will to issue the fiat or the veto, and it belongs to the very essence of right action to choose, it may be with intense effort, the higher motive instead of the lower. Moral victory is, then, worth securing, not only for its own sake, but because it makes future victories more easy, and defeat becomes proportionately disastrous.

The goal of freedom thus becomes such a cleansing of the springs of action, by continued negation of the lower motive and suppression of the lower self, that the unworthy act shall become practically impossible, because not thought of as a real possibility. The birds are so often frightened away that they no longer light upon the head, much less make their nests in the hair. The saint, it may be believed, does not feel secure in the possession of his sainthood till temptations to evil cease to allure him; the philanthropist is not

sure of his altruism till he feels a healthy scorn for "miserable aims that end with self." We see thus why it is that we often pass judgment upon what we are rather than upon what we do. "We reproach ourselves for being such agents as to choose the good so feebly, or the bad so readily." When an act is committed which brings the sting of self-reproach, condemnation extends beyond the single act of choice to the previous choices which have prepared the way for it and made it possible. But the judgment upon self—the subject of the volition—does not imply that at every stage we were determined to act as we did; rather we feel, certainly, that we have let ourselves drift when we might have prevented it.

Suppose, now, that the goal of morality has been reached, and that unity and order have been brought into the moral universe through the subjection of all aims and desires to a supreme ideal, freely chosen and persistently followed. Is freedom thereby abrogated? We should rather say that its goal—perfect harmony with the moral law—has been attained. "Our wills are ours, to make them thine." But if the *posse non peccare* passes over into the *non posse peccare*, the impossibility of sinning will be different, say, from the impossibility of the hopeless drunkard's reform, an impossibility against which an element of his nature vainly protests and revolts. We may, if we please, call the climax of freedom moral necessity, but it is a necessity not antedating choice, but one which is freely chosen. A self-imposed necessity, the necessity of the moral imperative which says, "Here I stand; I cannot do otherwise," is very different from a metaphysical necessity, or one which is imposed from without. And when the goal of freedom is reached, moral distinctions and moral values will not disappear, because the goal has been freely chosen.

We have tried to show how, on the hypothesis of free-

will, the choice of to-day can condition the range and intensity of the motives presented to-morrow, and so provide for moral progress and stability of character. Ethics demands for our acts of will not only liberty, in the sense of absence of necessity, but uniformity. We must be able to count upon what a man will do, to judge of his probable future actions by his past actions. This is what Professor Mackenzie seems to demand when he says that we need in the moral life not only freedom but necessity, for necessity, he suggests, may be defined as uniformity.[1] The reign of law is, indeed, one of the essential conditions of freedom; without it freedom would be of no use. A deterministic atmosphere is the only atmosphere in which freedom can breathe. Without a necessary connection between cause and effect, between means and end, reason would never be sure that her commands would be executed and her purposes fulfilled. Again, each act of will must exert a certain permanent influence upon character, in a reflex way, if what we call a stable character is to be achieved, and if the demands of the lower nature are to become less importunate and the higher voices more clear and controlling. It is essential, we may say, to morality and to moral accountability that the fiat of will, when once issued, should leave an indelible impress not only upon the world of phenomena but upon the self that issues it. Without a determinism of things, things would not be serviceable to thought, there would be no certain channels of communication between mind and mind, all control over events would be lost and freedom would be reduced to impotence. Without a determinism of habit, likewise, persistence in a chosen course of action would lack its reward of increased facility and skill, and the moral task would become a labor of Sisyphus, ever to be begun anew and never rewarded with real progress:

[1] *Manual of Ethics*, p. 93.

"Nur das Gesetz kann uns die Freiheit geben."

What place then remains for liberty, if the causal reign is so extended? M. Guyau, in his *Non-Religion of the Future*, speaks of the supposition that mere free-wills, not substances, were created, and remarks: "It must be confessed that these free-wills have been immersed in a deterministic universe, which leaves them little liberty of action. . . . "If God gave us liberty, He was very miserly about it. . . . Why does our free-will exist in the midst of conditions so unfavorable to it, so calculated to render it ineffective?" [1] The answer will be, as we have seen, that a deterministic atmosphere is not opposed to freedom, but is essential to its exercise; and that, on the other hand, without the initial possibility of choosing evil as well as good, no morality, so far as we can see, would for the human race ever exist. To provide room for the reality and the development of the moral life two postulates are needed—first, freedom, that we may be able to choose the highest ideal, and, second, a certain connection which we may call conditioning, and in a sense causal, between the choices of to day and the choices of to-morrow, that we may be able to make continued progress toward this ideal.

(2) The law of habit as applied to choices—that a choice once made is likely to be repeated—does not in itself fully satisfy the causal principle in its application to volition. The causal chain is broken, the determinist insists, if in any situation the possibility of two alternative responses is admitted. Indeterminism at any point means to him lawlessness and chaos. To-day, it may be said, the controversy is somewhat narrowed. Psychological analysis has driven motiveless choice from the field, and it is generally acknowledged that man can no more act without motive

[1] pp. 437–438. (E. T.)

than he can jump out of his own skin. The real question now concerns the interpretation of the fact of motived choice. Where two lines of action are equally attractive and seem in deliberation equally to solicit the will, there is nothing in volitional experience to suggest that the motive actually adopted was so related to previous tendencies and habits that its choice was absolutely predetermined to the exclusion of the choice of the competing motive. On the contrary, in deliberation and the moment of action consciousness testifies to power of selection between motives. Nor can appeal be successfully made to the *ex post facto* judgment that since A, as motive, was chosen instead of B, therefore A was the "strongest" motive and necessarily prevailed over competitors. For in this case A is nothing apart from its being consciously attended to, and deliberately chosen, and the question at issue is as to the nature of conscious attention and deliberate choice. The only chance of finding empirical support for the deterministic assumption is by an appeal to a more or less hypothetical physiology and physics of the brain. "So long as we keep to the purely empirical ground of what, before and during the action, takes place in and before consciousness, it is not possible to demonstrate the validity of the causal law in the sphere of the will or of the mental life in general."[1]

To prove that all motivation is determination the determinist must take the "high priori road." Acts of choice, he insists, like all changes in the universe, are the inevitable outcome of the sum of previous conditions. "If man determine himself," says Hobbes, "the question still remains, what determined him to determine himself in that particular manner," and the determinist insists that adequate knowledge of the man's previous character would in all cases enable us to give the answer. When A and B, as motives, solicit the

[1] Höffding: *Outlines*, p. 344.

will, and A is chosen instead of B, what was the motive, it is asked, for the choice of motive A? If you could assign some motive, say *a*, for the choice of motive A, the same question will recur in regard to this, and so on *ad infinitum*. The indeterminist at every stage will say the choice is free; and the determinist will insist that it is determined or the cosmos is thrown into disorder.

Kant says that there are some questions which should not be asked. Possibly the question of Hobbes quoted above is one of them. Such an infinite regress as the question suggests is unknown to psychology. The act of attention, Professor Royce insists, is both cognitive and volitional. "Whenever an individual acts, his deed is at once, and inseparably, an act of knowledge and an expression of purpose—an insight and a choice. . . . To attend is to be guided in your momentary deed by what you know, and determined in your knowledge by what you do. . . . An act of attention, I repeat, is at once an act by which we come to know a truth, and an act by which we are led to an outward deed."[1] We have here, it seems, a sort of dead-lock between the claims of the cognitive and volitional elements in attention which no analysis of the fact of motivation is able to break.

In its application of causality to volition, determinism takes its cue from the causality of nature. Causation in nature might be reduced to a mere succession—a sort of Heraclitean flux—from which all necessity except that of constant change was eliminated. It could then be asked, "If all things change, why not character also?"[2] Determinism in this case could admit the possibility of moral reform or degeneration, but apparently only at the expense of the stability and reliability of character upon which such emphasis is laid.

[1] *The World and the Individual*, Second Series, pp. 353–356.

[2] See Dunkmann: *Das Problem der Freiheit*, Zurich, 1899, p. 21.

If, as is usually held, the causal principle demands that there should be among physical phenomena an unbroken chain of cause and effect, it is no demand of thought that thought itself and voluntary attention should be intermediate links in this chain. In the conscious sphere the application of the causal principle is different. It here demands that for every act of the conscious self there be a real actor, rather than that the actor himself should be necessitated or determined to act as he does, and not otherwise. His own activity, rather than the changes among phenomena, will be to him the clearest revelation of what cause, in the full sense, is. To this view of the matter Dr. Martineau has given classic expression; "The psychologist insists that we carry the idea of causality with us into nature, instead of taking it thence; that we do not discover it in the phenomena, but insert it behind them; that what we need from it is, to apprehend why they are so and not otherwise, and have the definite order into which they have set; and that apprehension is supplied in a determining will which might issue other things but does issue these. This determining power alone is what he understands by cause; and whatever necessity there is (other than logical) is but the product of its freedom, the self-imposed method of its own action. In external nature, therefore, we must not look for alternative causation; *there*, contingency has ceased; it is the realm of immanent volitions, already in the executive stage, and parted from the essence and act of causality. From that field, therefore, the very object of our quest is absent in its initiative; it is vain to seek the living among the dead."[1]

Free-will in its moral bearings, or the capacity to choose between good and evil, doubtless implies an element of pure willfulness or caprice. An initial power to say "Evil, be thou my good," is correlative to the power to choose the highest

[1] *A Study of Religion*, vol. ii, pp. 233, 234.

ideal and bring the entire life under the control of reason. Without the former, so far as we can see, the latter would lose moral significance, for a forced obedience to the moral law is no obedience at all. Difficult, as it doubtless is, to justify the postulate of freedom to the theoretical reason, its value for the practical reason is so great that ethics cannot afford to dispense with it.

V

FREE-WILL AND THEOLOGY

In the theological aspect of the free-will controversy the question takes on at once its most difficult form, and the one most closely connected with our deepest interests. In a world governed by Supreme Intelligence, or Infinite Love, both the blind necessity of fatalism and the chaotic indeterminateness of pure fortuitism or casualism are excluded; but in the sphere of personal theories of the will the arguments favoring both determinism and indeterminism are raised to their highest power. Without venturing very far into this labyrinth, we shall try to indicate briefly the more prominent points of the discussion.

If we are to escape from an infinite regress of finite causes—

"Ex infinito ne causam causa sequatur," (Lucr. ii, 255)

we have to postulate some ultimate Being behind the finite process. If the nature of this Being is impersonal, then necessity underlies freedom. If it is personal, then the question as to the primacy of the intellect or will inevitably arises. If in creating the world God had no power not to create it, that is, if the act of creation was necessary, then the divine choice being necessary, we must, as in the case of the relation of human motive and volition, ask the ground of this necessity, and a new regress is begun. Theology at this point usually adopts the Augustinian view, that the creative act was not necessary, and that divine freedom is the ultimate principle of things. A theological corollary

from this doctrine of the divine freedom is that man, made in the image of God, is likewise free. He must share in the divine freedom if he is to be in a true sense a child of God, a co-worker with Him, and a partaker of the divine nature. If the belief in divine and human freedom are thus closely related in Christian theology, the same is true in speculative theism. The clearest revelation we have of the nature of God (outside of the Christian revelation) is in the nature of man. If there is no free spirit in man, no principle of self-determining activity, distinguished from necessity, no free spirit will be found in the universe. On philosophical grounds the belief in God and freedom must stand or fall together.

Historically, however, we find that both theism and dogmatic theology have raised some powerful objections to a belief in human free agency. The theological foes of free-will are the doctrine of sin, including the correlative doctrine of grace, and the doctrine of the divine foreknowledge. The doctrine of sin has, it is true, deepened the sense of guilt and responsibility, but has emphasized the "slavery of the will," and admitted freedom, if at all, only in the sphere of civil and secular relations. The correlative doctrine of grace, as the all-important factor in moral regeneration, has tended to minimize the moral significance of the will; while the doctrine of foreknowledge, as taught by an Augustinian theology and a speculative theory of the Absolute, has been urged against free-will with overwhelming force.

Much of the discussion, so far as it is unfavorable to free-will, has concerned the present state of man, assuming him to be already corrupted and morally enslaved by sin, and it must here be admitted that the Augustinian insight into man's moral experience is deeper than the Pelagian. Many treatises on morals are, indeed, justly chargeable with superficiality—with ignoring, as has been said, "a whole hemi-

sphere of moral experience"—when they pass over the facts which find expression in Ovid's "*Video meliora*, etc.," or St. Paul's "Who shall deliver me?" But admitting this limitation upon the will and its present impotence, unaided by divine grace, to attain to the highest spiritual good, the central question of the relation of sin in its most general conception to the divine agency or permission or foreknowlege still remains.

That God cannot be the author of sin is the declaration of theologians of all schools. How then did sin arise? The argument for admitting free-will at this point is two-fold. The more strictly it is held that moral evil in the race is largely or mainly referable ultimately to the sin of Adam, that is, the more the responsibility for race sin is shifted back upon the first sinful choice, the greater the need of an initial ability in order to ground the responsibility. The first sin, secondly, cannot as in the case of later sinful choices be explained as the outcome of a corrupt nature, for man, theology holds, was created in the moral image of God with an innocent and uncorrupted nature.

The great champions of theological determinism, Augustine and Calvin, have, whether consistently or not, admitted free-will—that is, the power to choose between good and evil—at this point. "*Primum liberum arbitrum posse non peccare, novissimum non posse peccare.*" (*De. Civ. Dei*, XXII. 37). "Adam might have stood if he chose, since it was only by his own will that he fell. . . . Still he had a free choice of good and evil," etc. (Calvin: *Institutes*, I. xv. 8; *cf. Westminster Confession of Faith*, IX. 2.)

But how is this initial act of free choice related to the divine foreknowledge and decree? Here is the *crux* of the whole question as to the relation between divine foreknowledge and human sin. If predestination means efficient causation, and if it applies in the same sense to both good and bad actions, the result is an unethical monism where

moral qualifications are meaningless. We may hold an easy-going optimism in which the sense of guilt is regarded as illusory, and, according to a well-known formula, "God is good; God is all." In strictness, though, all acts are reduced to moral indifference, for nothing really remains which can be called the act of a finite personal agent. Moral and physical evil are reduced to the same category:

> "If plagues or earthquakes break not heaven's design,
> Why, then, a Borghia or a Cataline?"

Even to Professor Royce's notable attempt[1] to harmonize the human will and the divine will, serious objection may be taken from the moral standpoint. In his earlier exposition he says: "The many forms of will form one," and "the one will stands differentiated into the many."[2] "As to the relation of this individual, as thus defined [as having a life-plan, or aiming toward an ideal], to God, I shall be equally explicit. I assert (1) that the individual experience is identically a part of God's experience, *i. e.*, not similar to a portion of God's experience, but identically the same as such portion; and (2) that the individual's plan is identically the same as God's attentively selected and universal plan."[3]

This conception of the Absolute as the principle (or Person) in which the life-plans of finite individuals are included and unified can hardly be, in spite of the author's assertion that it undertakes to be,[4] the conception of an ethical theism. The life-plans of bad as well as good men are equally included in the unity of the Absolute. "A relatively, although never a wholly diabolical or damnable individual life ideal is perfectly possible; and the relative unity of an individual

[1] In the *Conception of God*, and *The World and the Individual*, Series I and II.

[2] *Conception of God*, p. 74.

[3] p. 292.

[4] p. 50.

self can be, and often is, defined with reference to just such a relatively bad or devilish ideal."[1] When we read, a few pages later, that the individual plan "is identically a part of God's plan, so that the attention that thus selectively determines my ideal is not similar to, but actually identical with, the fragment of the Divine will, as defined earlier in this paper, *i. e.*, with an element of the Divine attention,"[2] we feel like insisting that such a relation of the One to the many is an unethical one, and that the complete identification of the Absolute with the Holy One of religion is impossible. Either the relatively diabolical life-plan, whether due to forgetfulness of the good, or the failure or refusal to attend to the good, is not really diabolical or sinful at all; or else, when the good and the bad plans are alike merged in the Absolute plan as parts of it, ethical distinctions are transcended in the sense of being annulled.

The moral consciousness, warned by the extreme interpretation which can be placed upon foreknowledge, may say "In the name of human morality, let us limit the foreknowledge of God."[3] This is the position of Professor James and Dr. Martineau. Foreknowledge, the latter admits, is an attribute proper to Deity; but the creation of moral beings implies a self-limitation of the divine foreknowledge.[4] That the solution is not wholly satisfactory is shown by Professor James' attempt to carry it out by the use of the chess-board illustration.[5] The divine Player cannot foresee the particular move which the novice, the human agent, is to make, but as He knows all possible moves and the reply to be made to

[1] pp. 288 *f.*

[2] p. 293.

[3] See Picard, *Christianity or Agnosticism*, p. 162.

[4] *Study of Religion*, vol. ii, pp. 262–263.

[5] *Will to Believe*, pp. 181 f. The illustration was used in a somewhat different connection by Hazard: *Freedom of the Mind in Willing*, Bk. I, ch. xii.

each, the issue of the game is certain. We admire here the boldness with which chance or contingency is brought into the universe, but we notice that even Professor James, to use his own figure (p. 180), is careful to tie a string to the bird lest it fly out of his sight. To the divine Contestant the outcome of the game is certain and predetermined, although the several moves are contingent upon an unforseen human choice.

Two remarks may here be ventured. The arguments for throwing back upon the Creator the responsibility for human sin are equally strong whether or not sin was foreseen, as possible or as certain. The creation of a world where present evils physical and moral (or worse evils) were only foreseen as possible, or again the creation of a world of sentient beings where nothing was known as to what they would do or suffer, is surely as difficult to reconcile with the divine perfections, as a world whose actual evils were perfectly foreseen. If evil is to be, mere foreknowledge of it (excluding now authorship of evil) does not detract from the moral attributes of God. The existence of evil and its providential permission, not its foreknowledge, is the real point of difficulty. Secondly, such providential control as Professor James postulates may be conceived as so extensive as to be as hard to reconcile with human responsibility as is complete foreknowledge. Human thoughts and desires may in their very inception be the moves on the chess-board whose possibility the divine Player foresees and is ready to meet. In fact, if they are not, the very issue of the game as well as the successive moves may be left in doubt, and evil instead of good may triumph in the universe. The "first springs of thought and will" may be then so under divine control that the "fountain of contingency" may be practically closed, and the region given over to chance and uncertainty, may be reduced to a minimum. Certainly, the relation of the divine Spirit to the

human spirit, can be no merely external one, and we may argue *ad hominem* that if such a providential control of human volition as shall certainly secure the fulfillment of the divine plan is not inconsistent with freedom, no more is a foreknowledge of the steps which lead to that fulfillment. The sovereignty of God in His providence is as difficult to reconcile with free-will as His sovereignty in predestination.

A thoroughly moral view of the world will hold both to the validity of moral distinctions—the ultimate difference between right and wrong—and to the final triumph of the right. Fatalism or hyper-Augustinian predestination leaves no room for the former; but a cosmological doctrine of chance or of unlimited freedom leaves open the possibility of a final moral anarchy, in place of a reign of righteousness.

The denial either of the sovereignty of God in the interests of free-will, or of free-will in the interests of sovereignty, may seem intellectually more heroic than the attempt to harmonize the two, yet apart from deduced consequences there is no self-evident contradiction between them. "The two great postulates of divine sovereignty and human freedom carry a convincing note of reality, as the distant conclusions to which they have been speculatively carried do not."[1] A theodicy which at once asserts eternal providence and human freedom may find support in the complementary feelings of dependence and of guilt or responsibility upon which, empirically, these doctrines may be said to rest.

The apparent "antinomy," so far as it affects our view of God, is between the metaphysical attributes of omniscience (including knowledge of all the future) and omnipotence, and the moral attributes of holiness and justice. That no purely speculative solution is for our thought possible may follow from the nature of the case, for in the relation of the human to the divine will, the deepest problems of philosophy,

[1] T. S. Hamlin, D. D., in *Independent*, Jan. 16, 1902.

both intellectual and moral, are focused. The problem involves the relation of the one to the many, of being to becoming, of the eternal to the temporal, of the perfect to the imperfect, of the Holy One to that evil in the creature whose very existence casts for us a shadow upon the complete rationality of the universe. Modern theology has, we believe, in these circumstances rightly chosen to follow our deepest moral and religious instincts rather than to sacrifice either to the supposed claims of speculative consistency. The religious consciousness shrinks from holding that God was the author of sin, or that He could create a world without knowledge of the consequences of the creative act; and our moral experience testifies not only to a freedom of choice which shall make morality possible, but to the working of a Power not ourselves, which makes for righteousness, and works not to annihilate the human will, but to secure an ethical harmony between it and the divine.

VITA.

THE writer was born in New York City, December 3rd, 1865. After preparatory training at Dr. Chapin's Collegiate School, he entered Princeton (then the College of New Jersey), in September, 1883, graduating (A. B.) in 1888. In college, studied philosophy under Drs. McCosh, Patton and Ormond, and at graduation was awarded the Chancellor Green Mental Science Fellowship. Entered Princeton Theological Seminary in 1894, graduating in 1896. In 1896–97 was a graduate student at Princeton, receiving in 1897 the degrees of A. M. from the University and B. D. from the Theological Seminary. For four years, 1897–1901, was professor of Logic and Psychology in Centre College, Danville, Kentucky, and instructor in New Testament Literature in Danville Theological Seminary. Student in Columbia University in 1901–1902.